

APPENDIX A

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

Nos. 2022-1293, 2022-1294,
2022-1295, 2022-1296

IN RE: CELLECT, LLC, APPELLANT

Argued: June 9, 2023
Decided: Aug. 28, 2023

Appeals from the United States
Patent and Trademark Office, Patent
Trial and Appeal Board
in Nos. 90/014,453, 90/014,454,
90/014,455, 90/014,457

Before LOURIE, DYK, and REYNA, *Circuit Judges*.

LOURIE, *Circuit Judge*.

Collect, LLC (“Collect”) appeals from four *ex parte* reexamination decisions of the United States Patent and Trademark Office (“USPTO”) Patent Trial and Appeal Board (“the Board”) affirming the unpatentability of: (1) claims 22, 42, 58, and 66 of U.S. Patent 6,982,742 (“the ’742 patent”); (2) claims 1, 17, 19, 21, 22, 27, 49, 55, and 61 of U.S. Patent 6,424,369 (“the ’369 patent”); (3) claims 1, 5, 11, 33, 34, 58, and 64 of U.S. Patent 6,452,626 (“the ’626 patent”); and (4) claims 25–29 and 33 of U.S. Patent 7,002,621 (“the ’621 patent”) for obviousness-type double patenting (“ODP”). *Ex parte Collect LLC*, Appeal 2021-005302 (P.T.A.B. Feb. 17, 2020), J.A. 27–49; *Ex parte Collect LLC*, Appeal 2021-005046 (P.T.A.B. Feb. 18, 2020), J.A. 51–73; *Ex parte Collect LLC*, Appeal 2021-005258 (P.T.A.B. Feb. 19, 2020), J.A. 76–97; *Ex parte Collect LLC*, Appeal 2021-005303 (P.T.A.B. Feb. 16, 2020), J.A. 2–24.¹ For the reasons provided below, we affirm.

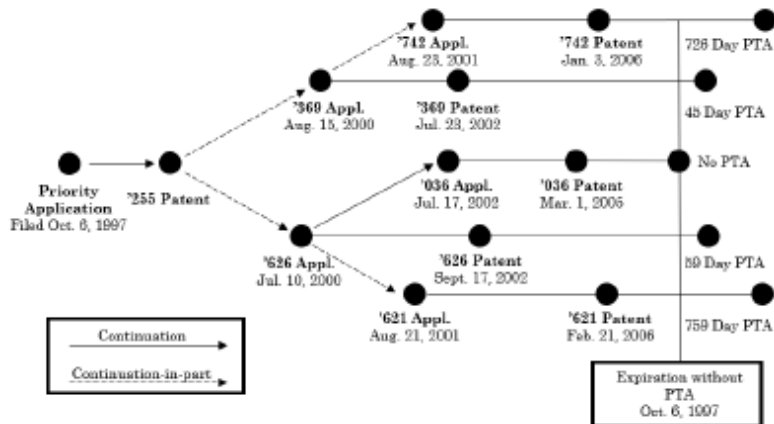
BACKGROUND

Collect owns the ’742, ’369, ’626, and ’621 patents (“the challenged patents”), each of which is directed to devices (*e.g.*, personal digital assistant devices or phones) comprising image sensors. The challenged patents are all interrelated, each claiming priority from a single application that issued as U.S. Patent 6,275,255 (“the ’255 patent”). The ’369 and ’626 patents are continuations-in-part of the ’255 patent. The ’742 patent is a continuation-in-part of the ’369

¹ The four appeals for *ex parte* reexamination issued by the Board essentially contain the same language and analysis. We treat Appeal 2021-005302 as representative.

patent, and the '621 patent is a continuation-in-part of the '626 patent. U.S. 6,862,036 (“the '036 patent”), another member of this family, is a continuation of the '626 patent.

Each of the challenged patents was granted Patent Term Adjustment (“PTA”) for USPTO delay during prosecution pursuant to pre-AIA 35 U.S.C. § 154(b). Because each family member patent claims priority from the same application, each would have expired on the same day but for the individual grants of PTA. None of the patents was subject to a terminal disclaimer during prosecution, and the challenged patents are all expired, even after factoring in the grants of PTA. The relationship of the applications and issued patents, including the individual grants of PTA, is indicated in the figure.



Collect sued Samsung Electronics, Co. (“Samsung”) for infringement of the challenged patents in the United States District Court for the District of Colorado. Samsung then requested the underlying *ex parte* reexaminations, asserting that the patents were unpatentable based on ODP, which

was not raised by the examiner during prosecution. In each reexamination proceeding, the examiner issued a Final Office Action determining that the challenged claims were obvious variants of Collect's prior-expiring reference patent claims. For the four *ex parte* reexamination proceedings, the asserted claims and ODP invalidating reference patents are indicated in the table, with representative claims indicated in bold.

Patent	Claims	ODP Reference Patent
'742	22, 42 , 58, and 66	'369
'369	1, 17, 19, 21, 22, 27, 49 , 55, and 61	'036
'626	1 , 5, 11, 33, 34, 58, and 64	'369
'621	25, 26, 27, 28, 29, and 33	'626

The invalidation of all claims under ODP can be traced back to the '036 patent, which is the only family member that did not receive a grant of PTA and thus retained an expiration date twenty years after the filing of the priority patent application. Specifically, the '621 patent claims were found to be unpatentable over the '626 patent claims, which were found to be unpatentable over the '369 patent claims. The '742 patent claims were also found to be unpatentable over the '369 patent claims. The '369 patent claims were themselves found to be unpatentable over the '036 patent claims. Thus, although the ODP invalidating reference patents form a network across the four *ex parte* reexamination proceedings, all invalidated claims can be traced back to the single family member patent that did not receive a grant of PTA: the '036 patent.

Collect appealed the rejection of the claims of the challenged patents to the Board. Collect noted that

under *Novartis AG v. Ezra Ventures LLC*, 909 F.3d 1367 (Fed. Cir. 2018), ODP does not invalidate a validly obtained Patent Term Extension (“PTE”) under 35 U.S.C. § 156, and argued that the Board should similarly hold that ODP cannot negate a statutory grant of PTA. That is, Collect argued that determining unpatentability under ODP should be based on the expiration dates of the patents before any PTA is added to the term.

Collect further argued that an ODP rejection is not proper under the equitable principles underlying ODP, including (1) preventing the receipt of an improper timewise extension of a patent term, and (2) preventing split ownership of related patents and subsequent potential harassment by multiple owners or assignees. Collect asserted that no terminal disclaimer could be filed to cure the rejection since the patents had expired, but that it had promised not to sell its expired patents. That, Collect contended, abrogated the risk of harassment by multiple owners or assignees. Collect also argued that the *ex parte* reexamination requests were not properly granted because the examiner had allegedly considered ODP during prosecution of the challenged patents, and so none of the requests presented a substantial new question of patentability, a requirement for a proper *ex parte* reexamination.

In each of the four appeals from *ex parte* reexamination, the Board sustained the examiner’s determinations that the asserted claims of the challenged patents were unpatentable under ODP. The Board further considered whether or not an ODP analysis on a patent that has been granted PTA should be based on the expiration date of the patent

with PTA or without PTA. First, the Board compared the cases on appeal for reexamination to that in *Merck & Co. v. Hi-Tech Pharmacal Co.*, 482 F.3d 1317 (Fed. Cir. 2007), a case in which a patent owner had filed a terminal disclaimer to overcome an ODP rejection, after which that patent was awarded PTE. There, as the Board noted, we held that “a patent term extension under [35 U.S.C.] § 156 is not foreclosed by a terminal disclaimer.” *Id.* at 1322; J.A. 33. Stated otherwise, the Board noted that a “patent term extension is from the expiration date resulting from the terminal disclaimer and not from the date the patent would have expired in the absence of the terminal disclaimer.” *Merck*, 482 F.3d at 1322–23; J.A. 33.

The Board also compared the cases on appeal to that in *Novartis*, a case in which we addressed the interaction between ODP and PTE in the absence of a terminal disclaimer. 909 F.3d at 1367. There, as the Board noted, we held that, “as a logical extension of [the] holding in *Merck & Co. v. Hi-Tech*,” ODP should be considered from the expiration date of the patent before the addition of PTE. *Id.* at 1373–74.

In the four underlying appeals for *ex parte* reexamination, the Board framed the issue as a question of how PTA affects an ODP analysis and whether an ODP analysis should be based on the expiration date of a patent with or without any granted PTA added. J.A. 35–38. The Board concluded that Collect’s argument that a judge-made doctrine (*i.e.*, ODP) cannot cut off a statutorily authorized time extension (*i.e.*, PTA) was unpersuasive because it ignored the text of § 154 and the holding of *Novartis*. J.A. 35. First, the Board concluded that the reasoning

in the precedent, including *Merck*, was based on differences between the statutory language in § 156 and § 154. J.A. 35–36. Second, the Board found that the statutory language in § 154(b)(2)(B) makes clear that any terminal disclaimer should be applied after any PTA is granted or, in other words, that a PTA cannot adjust a term beyond the disclaimed date in any terminal disclaimer. J.A. 36–37. It therefore concluded that, unlike PTE, a grant of PTA shall not extend the term of a patent past the date of a terminal disclaimer. J.A. 38.

The Board also reasoned that terminal disclaimers arise almost exclusively in situations to overcome ODP rejections, and so Congress, by addressing terminal disclaimers in § 154, effectively addresses ODP. JA. 37. The Board further reasoned that this court has stated that ODP “prevent[s] an inventor from securing a second, later expiring patent” for an invention covered by a patent that was filed at the same time but that has a different patent term due to a grant of PTA. *AbbVie Inc. v. Mathilda & Terence Kennedy Inst. of Rheumatology Tr.*, 764 F.3d 1366, 1373 (Fed. Cir. 2014); J.A. 38. It found that this rationale applied. J.A. 38.

Based on those findings and reasoning, the Board held that both ODP and terminal disclaimers should be considered after any PTA. J.A. 38. That is, any ODP analysis or determination, whether or not a terminal disclaimer is required, should be based on the adjusted expiration date of the patent.

The Board further found that the asserted claims would have been obvious in view of the respective invalidating ODP references and noted that Collect did not dispute that fact. J.A. 43. Collect instead

focused its argument on whether or not ODP could cut short a grant of PTA. The Board also found that Collect received an unjustified timewise extension of patent term for the asserted claims of the challenged patents and that a risk of divided ownership, and subsequent harassment by multiple assignees, remained active. J.A. 44–46. Finally, the Board found that ODP was a substantial new question of patentability and that Collect’s arguments that the examiner had considered ODP during prosecution lacked merit. J.A. 46. In particular, the Board determined that there was no indication that the examiner had considered ODP during prosecution of the challenged patents. J.A. 46. Further, the Board concluded that the examiner’s knowledge of other Collect-owned patents, or his willingness to issue ODP rejections in the prosecution of other Collect-filed applications, did not amount to a finding that the examiner had considered ODP in the prosecution of the challenged patents. J.A. 46.

The Board sustained the finding of unpatentability of the claims under ODP, and Collect appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

DISCUSSION

Collect raises three challenges on appeal. First, Collect contends that the Board erred in determining that whether or not a patent is unpatentable for ODP is determined based on the date of expiration of a patent that includes any duly granted PTA pursuant to 35 U.S.C. § 154. Second, Collect contends that the Board erred in failing to consider the equitable concerns underlying the finding of ODP in the *ex parte* reexamination proceedings. Third, Collect contends

that the Board erred in finding a substantial new question of patentability in the underlying *ex parte* reexaminations, and thus that the reexamination proceedings were improper. We address each argument in turn.

We may not set aside the Board’s decisions unless they were “arbitrary, capricious, an abuse of discretion, unsupported by substantial evidence, or otherwise not in accordance with law.” *In re Sullivan*, 362 F.3d 1324, 1326 (Fed. Cir. 2004); 5 U.S.C. § 706(2)(A). ODP is a question of law that we review *de novo*. *In re Emert*, 124 F.3d 1458, 1460 (Fed. Cir. 1997). Whether or not a substantial new question of patentability exists is a question of fact that we review for substantial evidence. *In re Swanson*, 540 F.3d 1368, 1375, 1381 (Fed. Cir. 2008). “Substantial evidence is more than a mere scintilla and means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.” *Celgene Corp. v. Peter*, 931 F.3d 1342, 1349 (Fed. Cir. 2019) (quotation marks and citations omitted).

I

We first consider Collect’s challenge to the Board’s determination that the unpatentability of claims under ODP must be based on the date of expiration of a patent that includes any duly granted PTA pursuant to 35 U.S.C. § 154. That statute, in relevant part, reads as follows:

Contents and term of patent; provisional rights.

(b) Adjustment of Patent Term.—

(1) Patent term guarantees.—

(A) Guarantee of prompt patent and trademark office responses.—Subject to the limitations under paragraph (2), if the issue of an original patent is delayed due to the failure of the Patent and Trademark Office to—

(i)–(iv) [providing for appropriate notifications and USPTO response times],

the term of the patent *shall* be extended 1 day for each day after the end of the period specified in clause (i), (ii), (iii), or (iv), as the case may be, until the action described in such clause is taken.

(B) Guarantee of no more than 3-year application pendency.—Subject to the limitations under paragraph (2), if the issue of an original patent is delayed due to the failure of the United States Patent and Trademark Office to issue a patent within 3 years after the actual filing date of the application under section 111(a) in the United States or, in the case of an international application, the date of commencement of the national stage under section 371 in the international application, not including—

(i)–(iii) [providing for timing exceptions],

the term of the patent *shall* be extended 1 day for each day after the end of that 3-year period until the patent is issued.

(C) Guarantee of adjustments for delays due to derivation proceedings, secrecy orders, and appeals.—Subject to the limitations under paragraph (2), if the issue of an original patent is delayed due to—

(i)–(iii) [providing for delay conditions related to derivation proceedings, secrecy orders, and appeals], the term of the patent *shall* be extended 1 day for each day of the pendency of the proceeding, order, or review, as the case may be.

(2) Limitations.—

(B) Disclaimed term.—

No patent the term of which has been disclaimed beyond a specified date may be adjusted under this section beyond the expiration date specified in the disclaimer.

(C) Reduction of period of adjustment.—

(i) The period of adjustment of the term of a patent . . . shall be reduced by a period equal to the period of time during which the applicant failed to engage in reasonable efforts to conclude prosecution of the application.

35 U.S.C. § 154(b) (emphases added).

Because the arguments in this case involve comparison between § 154 and § 156, we also set forth the relevant text of § 156.

Extension of patent term

(a) The term of a patent which claims a product, a method of using a product, or a method of manufacturing a product *shall* be extended in accordance with this section from the original expiration date of the patent, which shall include any patent term adjustment granted under section 154(b), if—

(1)–(5) [providing requirements for a grant of PTE]

(c)(3) The term of a patent eligible for extension under subsection (a) *shall* be extended by the time equal to the regulatory review period for the approved product which period occurs after the date the patent is issued, except that . . . if the period remaining in the term of a patent after the date of the approval of the approved product under the provision of law under which such regulatory review occurred when added to the regulatory review period as revised under paragraphs (1) and (2) exceeds fourteen years, the period of extension shall be reduced so that the total of both such periods does not exceed fourteen years;

(g)(6) A period determined under any of the preceding paragraphs is subject to the following limitations:

(A) If the patent involved was issued after the date of enactment of this section, the period of extension determined on the

basis of the regulatory review period determined under any such paragraph may not exceed five years.

(B) If the patent involved was issued before the date of the enactment of this section and—

(i)–(iii) [providing for exceptions pertaining to exemptions, major health or environmental health effects tests, or clinical investigations before such date of the approved product], . . .

the period of extension determined on the basis of the regulatory review period determined under any such paragraph may not exceed five years.

35 U.S.C. § 156(a), (c)(3), (g)(6) (emphases added).

Collect argues that PTA and PTE should be factored into an ODP analysis in the same way, *i.e.*, determining whether or not claims are unpatentable under ODP based on their expiration dates before the addition of any granted PTA or PTE. Collect alleges that our precedent, legislative intent, and the statutory language all dictate this outcome. First, Collect asserts that *Novartis* holds that a statutorily authorized extension of patent term (*i.e.*, PTE) cannot be terminated by a judicial doctrine, here ODP. 909 F.3d at 1375. Because PTA and PTE are both statutorily authorized extensions of term, Collect contends that ODP cannot cut off PTA and that whether or not claims are unpatentable under ODP should be based on the expiration date that does not include the addition of any duly granted PTA.

Further, Collect argues that PTA and PTE have similar statutory limitations. Collect asserts that PTE is limited in that the patent owner must choose one patent to receive a term extension and that PTA is limited in that a grant of PTA cannot cause the patent's term to exceed the expiration date specified in a terminal disclaimer, pursuant to § 154(b)(2)(B). Collect further asserts that, under the Board's interpretation of § 154(b), any adjustment to related patents would invalidate them under ODP, and the only way to avoid wholesale invalidation of related patents would be to file preemptive terminal disclaimers. That, Collect asserts, would be incompatible with and would fundamentally change continuations practice.

In addition, Collect argues that legislative intent illustrates that PTE and PTA were meant to be mandatory term adjustment and extension provisions that restore patent term lost to different administrative delays. Collect notes that each statutory provision states that the extension "shall" be granted when particular conditions are met. 35 U.S.C. § 156(a) (stating that an extension "shall" be granted), 35 U.S.C. § 154(b)(1)(A), (b)(1)(B), and (b)(1)(C) (stating that "the term of the patent shall be extended").

Collect is supported by *amici* representing Biotechnology Innovation Organization and Pharmaceutical Research and Manufacturers of America ("PhRMA"). Intellectual Property Owners of America, writing in support of neither party, also urges reversal of the Board's decision.

The USPTO responds that, as a threshold matter, Collect does not dispute that the challenged

and reference patents are commonly owned, that the challenged patents expire after the reference patents, or that all challenged claims are patentably indistinct over claims in the reference patents.

The USPTO further responds that statutory language and precedent clearly illustrate that PTA and PTE should be considered differently from each other when determining whether or not claims are unpatentable under ODP. In particular, the USPTO argues that, while an extension pursuant to PTE is added to the patent term after a consideration of ODP, *see Novartis*, 909 F.3d at 1375, an adjustment pursuant to PTA should be added to the patent term before a consideration of ODP. The USPTO argues that our precedent and the statutory language are clear that PTE and PTA should be considered differently when analyzing ODP.

The USPTO argues that precedent does not hold that ODP does not apply to patents with PTA. Citing *AbbVie*, the USPTO asserts that, when a situation arises where related patents filed at the same time claim overlapping subject matter yet have different expirations due to PTA, ODP still applies to ensure that the applicant does not receive an unjust timewise extension of patent term. *AbbVie*, 764 F.3d at 1373. Further, the USPTO asserts that *Novartis's* statement that a judge-made doctrine such as ODP cannot be used to cut off a statutorily granted term extension cannot be viewed in a vacuum, and it is limited to the application of ODP to a patent with PTE. There is nothing in that case, the USPTO asserts, that suggests that it should be extended to hold that patents with extended terms due to PTA cannot be subject to ODP rejections.

The USPTO also argues that the statutory language is clear that terminal disclaimers cut short PTA but not PTE. In particular, the USPTO notes that § 154 mentions terminal disclaimers, but § 156 does not.

The USPTO further notes that while both statutory provisions indicate that an extension or adjustment “shall” be granted if various conditions are met, 35 U.S.C. § 156(a); 35 U.S.C. § 154(b)(1)(A), (b)(1)(B), and (b)(1)(C), the required conditions are limited by the presence of a terminal disclaimer in PTA but not PTE, 35 U.S.C. § 154(b)(2)(B). That statutory difference, the USPTO contends, indicates that Congress intended to treat the two frameworks differently from each other. The USPTO asserts that differential treatment was confirmed in *Merck*.

The USPTO’s position is supported by *amici* representing Alvogen PB Research & Development LLP, the Association for Accessible Medicines, and Samsung Electronics (Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc.). We appreciate the several *amicus* briefs and have considered the views they expressed.

First, we note that an ODP determination depends on an assessment of obviousness, *i.e.*, whether the claims of a later-expiring patent would have been obvious over the claims of an earlier-expiring patent owned by the same party. If so, absent a terminal disclaimer, the later-expiring claims are invalid. Application of that determination requires determining which is the later-expiring patent, which is why the date when PTA or PTE is applied matters.

Proceeding to the merits, we agree with the USPTO that PTA and PTE should be treated differently from each other when determining whether or not claims are unpatentable under ODP. PTA and PTE are dealt with in different statutes and deal with differing circumstances. We conclude that, while the expiration date used for an ODP analysis where a patent has received PTE is the expiration date before the PTE has been added, the expiration date used for an ODP analysis where a patent has received PTA is the expiration date after the PTA has been added. To say that PTA and PTE should be factored into an ODP analysis in the same manner merely because they both provide statutorily authorized time extensions that restore patent term due to various administrative delays, as *Collect* argues, is an unjustified attempt to force disparate statutes into one.

ODP is a judicially created doctrine that has its roots in 35 U.S.C. § 101, which states that an inventor may obtain “a patent” (*i.e.*, a single patent) for an invention. *In re Lonardo*, 119 F.3d 960, 965 (Fed. Cir. 1997). ODP “is intended to prevent a patentee from obtaining a time-wise extension of patent for the same invention or an obvious modification thereof” and prevents an inventor from claiming a second patent for claims that are not patentably distinct from the claims of a first patent. *Id.* A crucial purpose of ODP is to prevent an inventor from securing a second, later-expiring patent for non-distinct claims. This purpose applies equally to situations in which the later patents have received grants of PTA resulting from examination delays at the USPTO. *AbbVie*, 764 F.3d at 1373. Terminal disclaimers, which may be filed to overcome an ODP rejection assuming that the

first patent has not yet expired, are provided for in 35 U.S.C. § 253 and 37 C.F.R. § 1.321. No terminal disclaimers were filed by Collect, and the patents at issue have all expired, precluding any late filings of terminal disclaimers.

Our case precedent has clearly delineated how a patent that has received PTE, a statutorily authorized extension, interacts with ODP, a doctrine that limits the term of a patent or, at least, ties later-filed, commonly owned, obvious variations to the expiration date of an earlier-filed reference patent. In *Merck*, we held that PTE is not foreclosed by a terminal disclaimer. 482 F.3d at 1322, 1324. That holding was based on the fact that, while § 156 does not expressly reference terminal disclaimers, it provides for other requirements that must be met to obtain a PTE and that the extension “shall” run from the expiration date of the patent, as adjusted under § 154(b) to account for any USPTO delays. *Id.* at 1321–22. We noted that § 154(b)(2)(B) expressly excludes patents in which a terminal disclaimer was filed from the benefit of a term adjustment beyond that disclaimed date for delays caused by the USPTO, but that no similar prohibition existed in § 156. *Id.* at 1322. We therefore concluded that the calculation of a grant of PTE on a patent that has a terminal disclaimer “is from the expiration date resulting from the terminal disclaimer and not from the date the patent would have expired in the absence of the terminal disclaimer.” *Id.* at 1322–23.

The holding in *Merck* is premised on the fact that § 154 contains requirements separate and distinct from those in § 156 that indicate a congressional intent to speak to terminal disclaimers and ODP in

the context of PTA. We extended this logic in *Novartis*, where we held that ODP does not invalidate a validly obtained PTE. 909 F.3d at 1373. There, we noted that, “if a patent, under its original expiration date without a PTE, should have been (but was not) terminally disclaimed because of [ODP], then this court’s [ODP] case law would apply, and the patent could be invalidated,” but that “if a patent . . . is valid under all other provisions of law, then it is entitled to the full term of its PTE.” *Id.* at 1374

Together, *Merck* and *Novartis* establish that ODP for a patent that has received PTE should be applied based on the expiration date (adjusted to a disclaimed date if a terminal disclaimer has been filed) before the PTE is added, so long as the extended patent is otherwise valid without the extension. For the first time, here, we address how another statutorily authorized extension, PTA, interacts with ODP. Even though both PTA and PTE are statutorily authorized extensions, and each serves to recover lost term, each has its own independent framework established through an independent statutory schema.

Cellect relies heavily on *Novartis* for its argument that any statutorily mandated extension, including PTA and PTE, cannot be cut short by a judge-made doctrine like ODP. But that is not an accurate reading of that holding. In *Novartis*, we held that the presence of ODP would not cut off a duly granted PTE under § 156. Stated otherwise, whether or not claims are unpatentable for ODP is determined in view of the expiration date of the patents before any PTE is added. In *Novartis*, we merely “decline[d]” to allow “a judge-made doctrine [to] cut off a statutorily-authorized time extension.” *Novartis*, 909 F.3d at

1375. But there is no conflict between ODP and § 154. The PTE and PTA statutes have quite distinct purposes. PTE is designed to effectively extend the overall patent term for a single invention due to regulatory delays in product approval. PTA is designed to extend the term of a particular patent due to delays in the processing of that patent. There is nothing in the PTA statute to suggest that application of ODP to the PTA-extended patent term would be contrary to the congressional design. Indeed, Collect's interpretation of the PTA statute would effectively extend the overall patent term awarded to a single invention contrary to Congress's purpose by allowing patents subject to PTA to have a longer term than the reference patent. The USPTO's approach merely recognizes the distinct purposes and interpretation of the two statutes. It does not allow a judge-made doctrine to restrict the scope of the PTA statute.

As the USPTO argues, our case law and the statutory language dictate an outcome where an ODP analysis must be performed on patents that have received PTA based on the expiration date including PTA. In *AbbVie*, we held that ODP continues to apply where two patents that claim the same invention have different expiration dates, including where the different expiration date is due to a grant of PTA. 764 F.3d at 1373–74. Here, we have related patents that claim priority from the same application that, as conceded by Collect, claim overlapping subject matter and that have different expiration dates only because of PTA. Thus, under *AbbVie*, ODP still applies to ensure that the applicant is not receiving an unjust extension of time.

While *Merck* and *Novartis* do not directly govern this case because they address PTE, they inform our analysis because they recognize the differences between PTA and PTE.

In *Merck* and *Novartis*, the holdings were premised on meaningful and substantive differences evincing a clear congressional intent to constitute PTE and PTA as different statutory frameworks. In particular, those cases set forth how § 154 clearly states that PTA “shall” be granted when certain requirements are met. 35 U.S.C. § 154(b)(1)(A), (b)(1)(B), and (b)(1)(C). But those requirements include limitations that are separate and distinct from those in the PTE framework, including the inability to extend a term past any date in a filed terminal disclaimer. *Compare* 35 U.S.C. § 154(b)(2)(B) *with* 35 U.S.C. § 156(c)(3), and (g)(6) (providing for statutory limitations on length of PTE and number of patents that can be extended).

In addition, while § 154(b)(2)(B)’s provision regarding terminal disclaimers is not directly applicable to the present case since none were filed, it remains critical in our analysis of the statute. Section 154(b)(2)(B) provides that “No patent the term of which has been disclaimed [pursuant to 35 U.S.C. § 253] beyond a specified date may be adjusted under this section beyond the expiration date specified in the disclaimer.” Cellect had the opportunity to file terminal disclaimers in this case during both prosecution and *ex parte* reexamination. And, of course, the examiners had the opportunity, and perhaps the obligation, to reject certain of the pending claims, but they did not do so.

Terminal disclaimers are provided for in 35 U.S.C. § 253(a), which, in relevant part, provides that “A patentee, whether of the whole or any sectional interest therein, may, on payment of the fee required by law, make disclaimer of any complete claim, stating therein the extent of his interest in such patent.” Title 37 of the Code of Federal Regulations, § 1.321 includes information on what a terminal disclaimer must include to be effective. 37 C.F.R. § 1.321. In particular, the regulation provides that a patentee may disclaim any complete claim or claims in a patent, *id.* § 1.321(a), or may disclaim or dedicate to the public the entire term, or any terminal part of the term, of a patent to be granted, *id.* § 1.321(b), (c).

Terminal disclaimers are almost always filed to overcome an ODP rejection, so terminal disclaimers and ODP remain inextricably intertwined. *See Boehringer Ingelheim Int’l GmbH v. Barr Lab’s, Inc.*, 592 F.3d 1340, 1346 (Fed. Cir. 2010). As the Board stated, ODP and terminal disclaimers are “two sides of the same coin: the problem and the solution.” J.A. 37. Given the interconnection of ODP and terminal disclaimers as “two sides of the same coin,” J.A. 37, the statutory recognition of the binding power of terminal disclaimers in § 154(b)(2)(B) is tantamount to a statutory acknowledgement that ODP concerns can arise when PTA results in a later-expiring claim that is patentably indistinct.

Terminal disclaimers were the solution to the problems created by the multiple challenged patents. If terminal disclaimers had been filed in this case, the provisions of § 154(b)(2)(B) would have come into play. Congress intended that, when a terminal disclaimer has been entered in a patent subject to PTA, no patent

(or claim) may be extended beyond the disclaimed expiration date. Accordingly, in the absence of such disclaimers, it would frustrate the clear intent of Congress for applicants to benefit from their failure, or an examiner's failure, to comply with established practice concerning ODP, which contemplates terminal disclaimers as a solution to avoid invalidation of patents claiming obvious inventions, as we have here.

We thus conclude that ODP for a patent that has received PTA, regardless whether or not a terminal disclaimer is required or has been filed, must be based on the expiration date of the patent after PTA has been added. We therefore further conclude that the Board did not err in finding the asserted claims unpatentable under ODP.

II

We next consider Collect's challenge to the Board's determination that equitable concerns underlying ODP, including an improper timewise extension of a patent term and potential harassment by multiple assignees, are present in this case.

Collect argues that the equitable concerns underlying ODP, including an improper timewise extension of a patent term and potential harassment by multiple assignees, do not exist in this case. Collect asserts that the Board cannot and does not point to any evidence that Collect has purposely manipulated the system to delay the issuance of the challenged patents to improperly extend their term. Collect further asserts that it has never and will never split its patents among multiple owners, and thus the risk of claim splitting or harassment by multiple litigants is entirely speculative. Collect contends that the use

of ODP to invalidate related patents with shared expiration dates based on an alleged nonexistent risk of divided ownership is improper.

The USPTO responds that the Board's decision is properly grounded in the public policy surrounding ODP. The USPTO asserts that the Board did not err in determining that Collect received an unjustified timewise extension of its patent terms and that it does not matter how the unjustified extensions are obtained. The USPTO further asserts that gamesmanship is not the only issue, and that the mere presence of an unjustified extension is sufficient for the Board to find that claims are unpatentable under ODP. The USPTO further asserts that the Board did not err in determining that a risk of separate ownership existed (from, for example, creditors dividing the patents after a potential bankruptcy proceeding), or in determining that a terminal disclaimer would have been required to ensure continued common ownership even if the patents had the same expiration date. The USPTO also asserts that the Board did not err in finding Collect's declaration not to assign the patents insufficient.

We agree with the USPTO that the Board did not err in determining that Collect received unjustified extensions of patent term. Neither Collect nor the USPTO disputes that the asserted claims in the challenged patents would have been obvious variations of the respective claims in the invalidating ODP references. The obviousness of the asserted claims in each of the challenged patents can be traced back to the '036 patent. That is the only patent in the family that did not receive a grant of PTA and that

expired on October 6, 2017, twenty years from the date on which the priority application was filed. Therefore, any extension past that date constitutes an inappropriate timewise extension for the asserted claims of the challenged patents. To hold otherwise would, in effect, confer on the reference claims of the '036 patent PTA to which they were not entitled. We do, however, note that the non-asserted claims in the challenged patents are entitled to their full term, including the duly granted PTA, unless they are found to be later-filed obvious variations of earlier-filed, commonly owned claims. We have no basis for consideration of that issue here.

We also agree with the USPTO that the Board did not err in determining that a risk of separate ownership existed and, even in the absence of separate ownership, that a terminal disclaimer would have been required to ensure common ownership. As the Board found, the patents expired fewer than six years ago, so the risk remains for multiple assignees to seek past damages. While Collect has not engaged in actions that resulted in divided ownership in the past, and it has promised that it will not do so in the future, neither fact suffices to abrogate the potential future risk of multiple owners or assignees. Promises do not substitute for sound applications of rules of law.

Collect argues that, because it acted in good faith and because the grant of PTA takes into account any actions on the part of the applicant that may exacerbate the USPTO's delay, 35 U.S.C. § 154(b)(2)(C), it should not lose out on the grant of extra term that is required by statute. But there is no basis for an examiner to inquire into the intent of an applicant, or credit it. The ability of the applicant to

show good faith during prosecution does not entitle it to a patent term to which it otherwise is not entitled. An applicant's ability to show that it did not engage in gamesmanship in obtaining a grant of PTA is not sufficient to overcome a finding that it has received an unjust timewise extension of term.

III

We finally consider Collect's challenge to the Board's determination that the *ex parte* reexamination proceedings raised a substantial new question of patentability.

Collect argues that there was no substantial new question of patentability present in the underlying reexaminations, so the reexaminations were improper. In particular, Collect asserts that the same examiner analyzed all the challenged and reference patents, and was therefore aware of them, yet did not issue any ODP rejections during prosecution, despite issuing ODP rejections during the prosecution of other Collect-owned applications that he examined. Collect asserts that the Board artificially created a substantial new question of patentability by second-guessing the examiner's judgment.

Collect further argues that, even if we affirm the Board's holding that an ODP analysis for a patent that has received PTA is based on the expiration date including PTA, only the adjustment period, not the entire patent term, should be considered for invalidation.

The USPTO responds that the Board correctly determined that the reexamination requests raised a substantial new question of patentability because there is no indication that the examiner raised ODP

as a relevant issue during the prosecution of the challenged patents. The USPTO further contends that the examiner's knowledge of the reference patents and ODP rejection in other applications is not sufficient to find that ODP was actually considered and decided by the examiner during prosecution of the challenged patents.

The USPTO also responds that Collect's request only to invalidate any granted adjustment period rather than the entire patent term was waived, as it was not raised before the Board. Even if it was not waived, the USPTO asserts that invalidating only the adjustment would be tantamount to issuing a retroactive terminal disclaimer, which would be improper.

We agree with the USPTO that the Board's determination that the reexamination requests raised a substantial new question of patentability was supported by substantial evidence. Collect's arguments lack merit and amount to little more than attempting to prove a negative. The examiner's willingness to issue ODP rejections of claims in other Collect-owned patent applications but not in the challenged patents and his knowledge of the reference patents do not affirmatively indicate that he considered ODP here. Further, "[t]he existence of a substantial new question of patentability is not precluded by the fact that a patent or printed publication was previously cited by or to the [USPTO] or considered by the [USPTO]." 35 U.S.C. § 303(a). And, as the Board notes, neither party points to anything in the prosecution history that affirmatively indicates that the examiner considered whether or not an ODP rejection should be made. We thus conclude

that the Board's findings were supported by substantial evidence and that a substantial new question of patentability was present in the underlying *ex parte* reexaminations.

A substantial new question of patentability requires just that—a substantial new question. Here, where Collect itself does not indicate a single portion of the prosecution history explicitly showing that the examiner considered ODP, the threshold for showing a substantial new question has been met. The fact that this case is before us here without terminal disclaimers having been required itself strongly suggests that the examiner did not consider the issue.

We also agree with the USPTO that the question of invalidation of only the adjustment period raised by Collect on appeal is forfeited, as it was not raised before the Board. We further agree with the USPTO that, even if not forfeited, invalidation of only the adjustment would be tantamount to granting a retroactive terminal disclaimer, tying the expiration of the later-filed claims to the earlier-filed reference claims. A terminal disclaimer is not an escape hatch to be deployed after a patent expires. Collect had the opportunity to file terminal disclaimers during prosecution, even in the absence of an ODP rejection, yet it declined to do so. Now the challenged patents have expired, and the opportunity has passed. Invalidating only the adjusted term would in effect give Collect the opportunity to benefit from terminal disclaimers that it never filed.

CONCLUSION

We have considered Collect's remaining arguments but find them unpersuasive. For the foregoing reasons, the decision of the Board is affirmed.

AFFIRMED

APPENDIX B

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

Appeal 2021-005303
Reexamination Control 90/014,453
Patent 6,982,742 B2
Technology Center 3900

EX PARTE COLLECT LLC, PATENT OWNER AND
APPELLANT

Entered: Dec. 1, 2021

DECISION ON APPEAL

Before JAMESON LEE, ALLEN R. MacDONALD, and
MICHAEL J. ENGLE, *Administrative Patent Judges*.

ENGLE, *Administrative Patent Judge*.

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. §§ 134(b) and 306,
Appellant¹ appeals from the rejection of claims 22, 42,
58, and 66 of U.S. Patent No. 6,982,742 B2 (“the ‘742
patent” or “challenged patent”) in this *ex parte*

¹ Appellant states that the real party in interest is “Collect LLC,
a wholly owned subsidiary of Micro Imaging Solutions LLC.”
Appeal Br. 2.

reexamination. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

TECHNOLOGY

The application relates to “solid state image sensors which are configured to be of a minimum size and used within miniature computer systems known as palm top computers, personal digital assistants (PDA), or handheld computers/organizers.” ’742 patent, 1:21–26.

RELATED MATTERS

The challenged patent and its patent family have been involved in a number of proceedings before federal district courts and the USPTO. Appeal Br. 2–3 (listing 1 district court case, 20 *inter partes* review petitions, and 5 *ex parte* reexamination requests). Four of the reexaminations involve substantially similar issues on double patenting. *See* Appeal Nos. 2021-005046; 2021-005258; 2021-005302; 2021-005303.

For the challenged patent, three petitions for *inter partes* review were denied institution because “the scope of challenged claims 22, 42, 58, and 66 is uncertain.” IPR2020-00559, Paper 14, at 17 (July 21, 2020); IPR2020-00560, Paper 14, at 16 (July 21, 2020); IPR2020-00561, Paper 14, at 17 (July 21, 2020). As it was not raised in the present proceeding, we do not address indefiniteness here.

REJECTIONS

Claims 22, 42, 58, and 66 of the ’742 patent are rejected for nonstatutory double patenting over claims 1, 17, 28, 30, 49, 58, and 61 of U.S. Patent No.

6,424,369 (“the ’369 patent” or “reference patent”).
Final Act. 13–21.

Claims 22, 42, 58, and 66 of the ’742 patent are rejected for nonstatutory double patenting over claims 1, 17, 28, 30, 49, 58, and 61 of the ’369 patent in view of Harris (US 6,009,336). Final Act. 21.

ISSUE

Did the Examiner err in applying an obviousness-type double patenting rejection to two related patents that (1) claim the same priority date, (2) have different patent term adjustments, and (3) are expired?

ANALYSIS

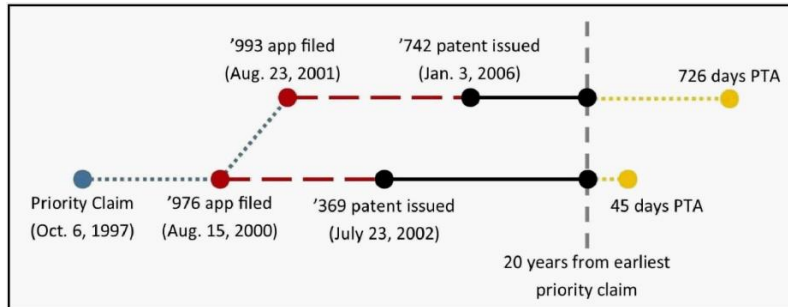
Overview

The challenged patent (the ’742 patent) is the child of the reference patent (the ’369 patent). The challenged patent issued after the reference patent, but both claim priority to the same application (filed Oct. 6, 1997) so they normally would expire at the same time (Oct. 6, 2017).² 35 U.S.C. § 154(a)(2). However, due to various delays by the USPTO during prosecution, both were granted a patent term adjustment (“PTA”) under 35 U.S.C. § 154(b), with the challenged patent receiving significantly more PTA than the reference patent (726 days vs. 45 days). Therefore, the reference patent expired *before* the challenged patent. Both patents are now expired, but

² We agree with the Examiner that whether the claims are actually entitled to the claimed date is not relevant to a double patenting analysis. Ans. 4, 9; Appeal Br. 21-24. By statute, expiration is based on a priority date “if the application *contains a specific reference to an earlier filed application,*” regardless whether any claim is actually entitled to that priority date. 35 U.S.C. § 154(a)(2) (emphasis added).

the statute of limitations for past damages has not yet passed. 35 U.S.C. § 286.

The timeline below shows the relevant dates for the two patents, including priority, filing, issuance, expiration, and PTA, with the challenged patent on top and its parent (the reference patent) below:



*Timeline for expiration of '742 patent (top)
& '369 patent (bottom)*

In this reexamination, the examiners invoked the doctrine of obviousness-type double patenting to reject the claims of the challenged patent as obvious variants of claims in the reference patent. Final Act. 13–21. Appellant does not dispute that the claims of the reference patent would have rendered obvious the claims of the challenged patent. Instead, Appellant argues the reference patent cannot be used for double patenting because (1) a judicially-created doctrine cannot take away statutorily guaranteed time, especially in light of the Federal Circuit’s treatment of patent term extensions (“PTE”) under 35 U.S.C. § 156, (2) the result would be inequitable given the facts here, and (3) no substantial new question of patentability has been raised because the examiner should have considered double patenting in the original prosecution. *See* Appeal Br. 4–21.

We are not persuaded by Appellant's arguments. First, unlike a PTE under § 156, the statute for a PTA (§ 154) states that any terminal disclaimer should be applied *after* any PTA. Because the primary purpose of a terminal disclaimer is to overcome double patenting, the same rule should apply to double patenting. Moreover, even if double patenting was based on the expiration date *before* applying any PTA (akin to a PTE), double patenting still would be appropriate here because two patents that are obvious variants and expire on the same day still need a terminal disclaimer to enforce common ownership. Second, the result here is not inequitable because the Federal Circuit has said the existence of any extra term of a second patent is itself what is inequitable, and Appellant still enjoyed the entire term of the earliest patent. Third, double patenting is a substantial new question because, regardless of what should have happened in the original prosecution, there is insufficient evidence that the original examiner actually considered double patenting.

Standard of Review

The PTO is “authorized during reexamination to consider the question of double patenting.” *In re Lonardo*, 119 F.3d 960, 966 (Fed. Cir. 1997); *see also* MPEP § 2258(I)(D). “As with statutory obviousness under 35 U.S.C. § 103, obviousness-type double patenting is an issue of law premised on underlying factual inquiries.” *Eli Lilly & Co. v. Teva Parenteral Meds., Inc.*, 689 F.3d 1368, 1376 (Fed. Cir. 2012).

Legal Background on Obviousness-Type Double Patenting, Terminal Disclaimers, PTA, & PTE

Obviousness-type double patenting is a “judicially created” doctrine that “prohibits an

inventor from obtaining a second patent for claims that are not patentably distinct from the claims of the first patent.” *Lonardo*, 119 F.3d at 965. “There are two justifications for obviousness-type double patenting”: (1) “to prevent unjustified timewise extension of the right to exclude granted by a patent no matter how the extension is brought about” and (2) “to prevent multiple infringement suits by different assignees asserting essentially the same patented invention.” *In re Hubbell*, 709 F.3d 1140, 1145 (Fed. Cir. 2013) (quotation omitted). For example, if an inventor receives a second patent with claims that are merely obvious variants of a first patent, double patenting helps prevent the patentee from (1) suing on the second patent after the first has already expired (i.e., improper time-wise extension) or (2) selling the two patents to different entities only to have both entities separately sue an alleged infringer on two obvious variants of each other (i.e., improper harassment by multiple assignees).

A patentee or applicant often can overcome double patenting by filing a terminal disclaimer. *Boehringer Ingelheim Int’l GmbH v. Barr Labs., Inc.*, 592 F.3d 1340, 1346 (Fed. Cir. 2010). Terminal disclaimers are expressly permitted by statute to “disclaim or dedicate to the public . . . any terminal part of the term” of a patent. 35 U.S.C. § 253(b). The USPTO has provided regulations on what a terminal disclaimer must contain to be effective. *E.g.*, 37 C.F.R. § 1.321. A terminal disclaimer solves the two concerns of double patenting by (1) making the *later* patent expire with the *earlier* patent and (2) rendering the second patent unenforceable if it is not commonly owned with the first patent. *E.g.*, 37 C.F.R. § 1.321(b)(2), (c)(3), (d)(3); MPEP §§ 804.02(VI),

1490(VI)(A), (IX). However, “a terminal disclaimer filed after the expiration of the earlier patent over which claims have been found obvious cannot cure obviousness-type double patenting.” *Boehringer*, 592 F.3d at 1347–48. Thus, a terminal disclaimer cannot cure any double patenting rejection against the expired patents here. Appeal Br. 19.

For two issued patents, double patenting and the need for a terminal disclaimer generally only apply to the *later* patent.³ See *Eli Lilly & Co. v. Barr Labs., Inc.*, 251 F.3d 955, 968 & n.5 (Fed. Cir. 2001) (“A *later* claim that is not patentably distinct from an earlier claim in a commonly owned patent is invalid for obvious-type double patenting.”; “A patent owner cannot avoid double patenting by disclaiming the *earlier* patent.” (emphases added)). The question then is how to determine which patent is “later.” The answer depends on whether the patents issued from applications filed on or after June 8, 1995. This date is six months after enactment of the Uruguay Round Agreements Act (“URAA”), which changed the term of a patent from (A) 17 years after issue to (B) 20 years from the earliest filing date of any non-provisional U.S. application to which that patent claims priority. 35 U.S.C. § 154.

For two post-URAA patents, the “later” patent generally is determined by looking at the *expiration* date. *Novartis Pharms. Corp. v. Breckenridge Pharm. Inc.*, 909 F.3d 1355, 1362–63, 1366 (Fed. Cir. 2018). For two pre-URAA patents or certain scenarios

³ For two co-pending applications, a provisional double patenting rejection against both applications may be appropriate if it is not yet known which will result in the later patent. See MPEP § 804(I)(1).

involving one patent on each side of the URAA date, the “later” patent is instead determined by looking at the *issue* date. *Id.* at 1362 (“Traditionally, courts looked at the issuance dates of the respective patents, because, under the law pre-URAA, the expiration date of the patent was inextricably intertwined with the issuance date, and used the earlier-issued patent to limit the patent term(s) of the later issued patent(s).”). Prior to the URAA, a patent expired 17 years after issuance, so “looking to patent issue dates had previously served as a reliable stand-in for the date that really mattered—patent expiration.” *Gilead Scis., Inc. v. Natco Pharma Ltd.*, 753 F.3d 1208, 1215 (Fed. Cir. 2014). Finally, if two post-URAA patents expire on the same day or two pre-URAA patents have the same issue date, then the patent with the higher patent number may be invalid for double patenting.⁴ *See Underwood v. Gerber*, 149 U.S. 224 (1893) (affirming Patent No. 348,073 was void over the same inventors’ Patent No. 348,072 when both patents had the same filing date, issue date, and expiration date).

A complication arises, however, in that Congress also provided two ways to potentially prolong the term of a patent. A patent term adjustment (“PTA”) under § 154(b) may adjust the term based on certain delays by the USPTO during prosecution, and a patent term extension (“PTE”) under § 156 may extend the term based on certain regulatory delays, such as the FDA

⁴ As the patents here issued on different dates, we need not resolve whether an analysis for patents issued on the same day should first look to priority date or filing date rather than patent number (e.g., two pre-URAA patents with the same issue date but the patent with the higher patent number has a significantly earlier filing date and priority date).

reviewing a new drug. 35 U.S.C. §§ 154(b), 156. The question before us now is how a PTA under § 154 should factor into the double patenting analysis, such as whether double patenting should be based on the expiration date *before* a PTA or *after*. The Federal Circuit already addressed similar questions for a PTE, yet it did so by contrasting the statutes for PTE (§ 156) versus PTA (§ 154). We discuss these cases below.

PTE & Terminal Disclaimers
(*Merck v. Hi-Tech*)

For a PTE under § 156, the starting point is *Merck & Co. v. Hi-Tech Pharmacal Co.*, 482 F.3d 1317 (Fed. Cir. 2007). In that case, the patent owner had already filed a terminal disclaimer to overcome an obviousness-type double patenting rejection. 482 F.3d at 1318–19. Later, the patent was awarded a PTE under § 156. *Id.* at 1319. The question before the court was whether a PTE under § 156 could be applied to a patent subject to a terminal disclaimer. *Id.* at 1324. The court held “a patent term extension under § 156 is not foreclosed by a terminal disclaimer.” *Id.* at 1322. In particular, “[t]he computation of a Hatch–Waxman patent term extension is from the expiration date resulting from the terminal disclaimer and not from the date the patent would have expired in the absence of the terminal disclaimer.” *Id.* at 1322–23. Put another way, a PTE under § 156 is applied *after* any terminal disclaimer.

The Federal Circuit reached this conclusion by contrasting PTE with PTA. For a PTA, “§ 154(b)(2)(B) expressly excludes patents in which a terminal disclaimer was filed from the benefit of a term adjustment for PTO delays.” *Merck v. Hi-Tech*, 482 F.3d at 1322. Specifically, the statute states that “[n]o

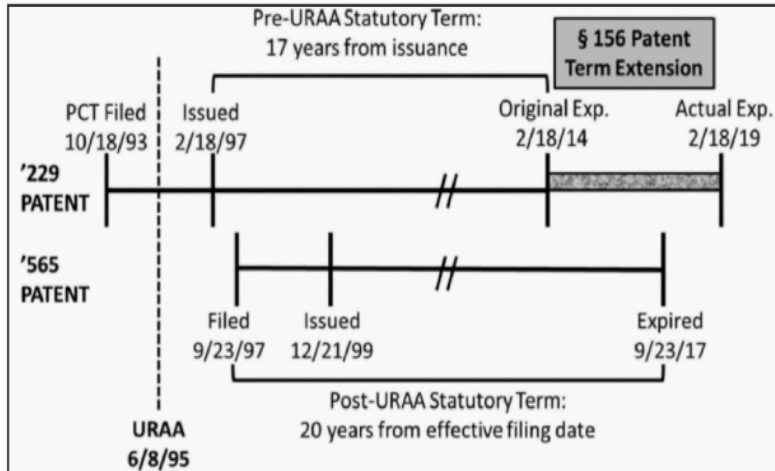
patent the term of which has been disclaimed beyond a specified date may be adjusted under this section beyond the expiration date specified in the disclaimer.” 35 U.S.C. § 154(b)(2)(B). The Federal Circuit explained that “[t]here is no similar provision that excludes patents in which a terminal disclaimer was filed from the benefits of Hatch-Waxman extensions” under § 156. *Merck v. Hi-Tech*, 482 F.3d at 1322. Thus, a terminal disclaimer is applied *before* a PTE *because* PTE is different than PTA.

PTE & Double Patenting
(*Novartis v. Ezra*)

The next question was how a PTE applied to double patenting in the absence of a terminal disclaimer. As noted above, a terminal disclaimer generally is filed to overcome obviousness-type double patenting. *In re Van Ornum*, 686 F.2d 937, 948 (CCPA 1982); 37 C.F.R. § 1.321(c), (d); MPEP § 1490(II). Given this relationship between double patenting and terminal disclaimers and given the holding in *Merck v. Hi-Tech* that a terminal disclaimer applies *before* a PTE, the Federal Circuit not surprisingly held “as a logical extension of our holding in *Merck & Co. v. Hi-Tech*” that double patenting also should be considered *before* a PTE. *Novartis AG v. Ezra Ventures LLC*, 909 F.3d 1367, 1373–74 (Fed. Cir. 2018). Thus, “if a patent, under its original expiration date without a PTE, should have been (but was not) terminally disclaimed because of obviousness-type double patenting, then this court’s obviousness-type double patenting case law would apply, and the patent could be invalidated.” *Id.* at 1374. “However, if a patent, under its pre-PTE expiration date, is valid under all

other provisions of law, then it is entitled to the full term of its PTE.” *Id.*

A timeline for the patents in *Novartis v. Ezra* is reproduced below:



Novartis v. Ezra, 909 F.3d at 1370. As shown in the timeline above, the challenged patent (the '229 patent) had an *earlier* filing date, issue date, and pre-PTE expiration date than the reference patent (the '565 patent). Because the challenged patent was the *earlier* patent (at least pre-PTE), the challenged patent was not invalid for double patenting. *Id.* at 1373–75.

PTA & Double Patenting

The question now before us is how a PTA affects double patenting. Appellant relies on one broadly worded sentence in *Novartis v. Ezra* to argue that “a judge-made doctrine” (i.e., obviousness-type double patenting) cannot “cut off a statutorily-authorized time extension.” Appeal Br. 11 (quoting *Novartis v. Ezra*, 909 F.3d at 1375). Although the holding in *Novartis v. Ezra* was about a PTE under § 156,

Appellant extends that argument to suggest that any PTA under § 154 also is a “statutory grant of additional term” that “cannot be deemed improper.” *Id.* at 12.

Appellant’s argument is not persuasive because it ignores the plain text of § 154 and the actual holding in *Novartis v. Ezra*.

First, contrary to Appellant’s assertions, the decision in *Novartis v. Ezra* reaffirms that a double patenting analysis *should* be done even if a patent has a PTE. The real question was whether double patenting should be considered *before* or *after* a PTE, with the court ultimately deciding double patenting should be considered *before* a PTE. *Novartis v. Ezra*, 909 F.3d at 1374 (“if a patent, under its original expiration date without a PTE, should have been (but was not) terminally disclaimed because of obviousness-type double patenting, then this court’s obviousness-type double patenting case law would apply, and the patent could be invalidated”). So here, we must do a double patenting analysis and the question is whether double patenting should be considered with the expiration dates *before* or *after* a PTA.

Second, the outcome for a PTE under § 156 in *Merck v. Hi-Tech* was based on the difference between § 156 and § 154. In particular, “§ 154(b)(2)(B) expressly excludes patents in which a terminal disclaimer was filed from the benefit of a term adjustment for PTO delays,” but there is an “absence of any such prohibition regarding Hatch–Waxman extensions” under § 156. *Merck v. Hi-Tech*, 482 F.3d at 1322. That reasoning in *Merck v. Hi-Tech* was important enough that when summarizing the prior

case, *Novartis v. Ezra* repeated the prior case's "contrast between § 156 for PTE with the language of § 154 for patent term adjustments." *Novartis v. Ezra*, 909 F.3d at 1373–74. Thus, the rule in *Merck v. Hi-Tech* and *Novartis v. Ezra* for when to apply a PTE does not apply to a PTA because those decisions were premised on the contrast between PTE and PTA.

Third, the statutory language in § 154 is clear that any terminal disclaimer should be applied *after* any PTA (i.e., a PTA cannot adjust a term beyond the expiration date in any disclaimer). 35 U.S.C. § 154(b)(2)(B) ("No patent the term of which has been disclaimed beyond a specified date may be adjusted under this section beyond the expiration date specified in the disclaimer."). Although Appellant asserts that the statute says the term "shall" be extended (Reply Br. 8), Appellant omits that all of those sentences are prefaced with the phrase "Subject to the limitations under paragraph (2)," which includes the limitations due to terminal disclaimers. *Id.* § 154(b)(1)(A), (B), (C). Thus, as recognized by *Merck v. Hi-Tech* and *Novartis v. Ezra*, the statute itself is clear that unlike a PTE under § 156, a PTA under § 154 shall *not* extend the term of a patent past the date of any terminal disclaimer.

Fourth, given that terminal disclaimers arise almost exclusively to overcome obviousness-type double patenting, Congress expressly addressing terminal disclaimers in § 154 is tantamount to addressing obviousness-type double patenting. See *Van Ornum*, 686 F.2d at 948; 37 C.F.R. § 1.321(c), (d); MPEP § 1490(II). Indeed, *Novartis v. Ezra* itself recognized that a rule for terminal disclaimers (from *Merck v. Hi-Tech*) should also apply to obviousness-

type double patenting as “a logical extension.” 909 F.3d at 1373. The *Novartis v. Ezra* court rejected the argument “that the *Merck* court’s rationale only spoke to the impact of a new PTE on preexisting terminal disclaimers,” instead finding that the prior “holding on the validity of a PTE for a patent that was terminally disclaimed *in order to overcome an obviousness-type double patenting rejection* is directly relevant to the instant case.” *Id.* at 1374 (quotation omitted). Obviousness-type double patenting and terminal disclaimers are two sides of the same coin: the problem and the solution. Just as *Novartis v. Ezra* found a rule on terminal disclaimers was “directly relevant” to double patenting and therefore applied that rule to double patenting as “a logical extension,” so too we hold that the statutory rule for terminal disclaimers in § 154 is directly relevant to double patenting and we apply that same rule to double patenting as a logical extension.

Indeed, in at least one related reexamination, Appellant itself argues that double patenting should be applied to post-PTA dates. *Compare* Appeal 2021-005302, Appeal Br. 7 (“the ’369 Patent . . . and ’626 Patent . . . have the same expiration date except for statutorily-authorized PTA”), *with id.* at 10 n.1 (“the ’626 Patent cannot be used as an obviousness-type double patenting reference because the ’626 Patent expired after the ’369 Patent”).

Finally, the Federal Circuit also previously said that “another crucial purpose of the doctrine” of double patenting was “to prevent an inventor from securing a second, later expiring patent” for “[p]atents . . . filed at the same time” that “have different patent terms due to examination delays at the PTO” under

“§ 154(b) (patent term adjustments).” *AbbVie Inc. v. Mathilda & Terence Kennedy Inst. of Rheumatology Tr.*, 764 F.3d 1366, 1373 (Fed. Cir. 2014); *see also In re Fallaux*, 564 F.3d 1313, 1319 (Fed. Cir. 2009) (“In some cases there may still be the possibility of an unjust time-wise extension of a patent arising from patent term adjustment under § 154 or patent term extension under § 156.”). That is precisely the scenario we have here where two patents have the same effective filing date but expire at different times due solely to PTAs.

Appellant provides no plausible reason for ignoring the clear statutory text and the contrast between § 154 and § 156 that formed the basis of *Merck v. Hi-Tech* and *Novartis v. Ezra*. Nor has Appellant provided any reason for applying the *post*-PTA date for terminal disclaimers yet the *pre*-PTA date for double patenting.⁵ We therefore hold that both obviousness-type double patenting and terminal disclaimers should be considered *after* any PTA.⁶

⁵ Applying different dates for double patenting versus terminal disclaimers also creates inconsistent results. For example, suppose the pre-PTA expiration date of Patent A is 1 day after Patent B. Therefore, Patent B could be used as a double patenting reference (pre-PTA) against Patent A, and a terminal disclaimer (post-PTA) would wipe out *all* PTA on Patent A. However, Patent A could *not* be used as a double patenting reference (pre-PTA) against Patent B, so Patent B could have an unlimited amount of PTA, even long after the expiration of Patent A.

⁶ 35 U.S.C. § 154(b)(3)(A) gives the Director some discretion “establishing procedures for the application for and determination of patent term adjustments.” Because we decide the case based on the reasoning above, we need not decide whether that discretion includes the PTA issues here.

*The District Court Decision in
Mitsubishi Is Not Persuasive*

Appellant also cites a district court decision in *Mitsubishi Tanabe Pharma Corp. v. Sandoz, Inc.*, No. 3:17-cv-05319, ___ F. Supp. 3d ___, 2021 WL 1845499, at *27–30 (D.N.J. Mar. 22, 2021). Appeal Br. 13–17. We do not find Appellant’s citation to *Mitsubishi* persuasive. *See also* Ans. 8.

First, an earlier district court decision in the Western District of Michigan came out the opposite way from *Mitsubishi*. *Magna Elecs., Inc. v. TRW Automotive Holdings Corp.*, No. 12-cv-654, 2015 WL 11430786 (W.D. Mich. Dec. 10, 2015). Although the *Magna Electronics* case appears to have settled prior to any appeal, we understand that the decision in *Mitsubishi* is currently on appeal to the Federal Circuit (No. 21-1876; filed Apr. 23, 2021).

Second, the *Mitsubishi* district court never addressed that double patenting applies even to two patents that have the same filing date, the same issue date, and the same expiration date. *Underwood*, 149 U.S. 224. For example, a terminal disclaimer is still needed to ensure that two patents remain commonly owned. *See Sandy MacGregor Co. v. Vaco Grip Co.*, 2 F.2d 655, 657 (6th Cir. 1924) (“in *Underwood v. Gerber* it was thought that the splitting up of one indivisible right into two and subjecting the infringer to suits by two different owners of the right infringed justified applying the defense of double patenting as against two patents issued on the same day”); *Van Ornum*, 686 F.2d at 945 (similarly summarizing *Underwood*).

Third, the district court’s entire discussion of the difference between § 154 and § 156 is relegated to a

single footnote in which the court does not appear to have understood that a terminal disclaimer is the standard way to cure double patenting, thereby overlooking why the Federal Circuit decided a rule for terminal disclaimers (*Merck v. Hi-Tech*) should also apply to a double patenting analysis (*Novartis v. Ezra*) as a “logical extension.” See *Mitsubishi*, 2021 WL 1845499, at *29 n.45.

Fourth, even within the same paragraph, the district court confuses when the challenged patent would have expired relative to the reference patent. Compare *Mitsubishi*, 2021 WL 1845499, at *29 (“absent the PTA granted to the ’788 Patent, both the ’788 Patent and the ’219 Patent would have the same expiration date”), with *id.* (“but for the § 154(b) PTA, the ’788 Patent would have expired before the ’219 Patent”). So it is not clear whether the district court was even considering the right facts.

Finally, in *Mitsubishi*, the challenged patent issued *before* the reference patent (May 17, 2011 vs. July 17, 2012). 2021 WL 1845499, at *27–28. That is opposite the present case where the challenged patent issued *after* the reference patent. Thus, even if we treated a PTA like PTE and double patenting were considered *before* a PTA, the outcome here still would be the opposite of *Mitsubishi* because the challenged patent in *Mitsubishi* was the *earlier* patent whereas the challenged patent here is the *later* patent.

For these reasons, we give little weight to the *Mitsubishi* decision.

*Double Patenting Here Was Proper
Regardless When the PTA Is Applied*

As discussed above, we hold that double patenting should be considered *after* any PTA is applied. Here, after applying the PTA, the challenged patent expired after the reference patent (PTA of 726 days vs. 45 days). Appeal Br. 10. Thus, the later-expiring claims of the challenged patent were properly rejected for obviousness-type double patenting over the earlier-expiring claims of the reference patent.

However, even if we treated a PTA like PTE and did a double patenting analysis *before* factoring in any PTA, a double patenting rejection still would be proper here because prior to the PTA, the challenged patent and the reference patent would have expired on the same day (Oct. 6, 2017). *Underwood*, 149 U.S. 224 (affirming a second patent as void when both patents had the same filing date, issue date, and expiration date); *see also* MPEP § 804(I)(B)(1)(b)(ii) (“If both applications are actually filed on the same day, or are entitled to the same earliest effective filing date[,] . . . the provisional nonstatutory double patenting rejection made in each application should be maintained until the rejection is overcome,” such as by “filing a terminal disclaimer in the pending application.”); Ans. 8 (“ODP is appropriate to be considered and addressed in reexamination, regardless whether two relevant patents have different expiration[] dates”). Here, the challenged patent is a later-issued patent claiming obvious variants of the earlier-issued reference patent. Even with the same expiration date, double patenting and a terminal disclaimer are still needed to ensure that the later-issued obvious variant retains common

ownership with the earlier-issued patent. This is necessary to accomplish double patenting's second goal "to prevent multiple infringement suits by different assignees asserting essentially the same patented invention." *Hubbell*, 709 F.3d at 1145; see also *Sandy MacGregor*, 2 F.2d at 657 ("in *Underwood v. Gerber* it was thought that the splitting up of one indivisible right into two and subjecting the infringer to suits by two different owners of the right infringed justified applying the defense of double patenting as against two patents issued on the same day"); see also *Van Ornum*, 686 F.2d at 945 (similarly summarizing *Underwood*). Appellant never addresses that double patenting applies to patents with the same expiration date.

Appellant does argue that "there has been no harassment by multiple assignees" because the patents have been commonly owned so far and the patents are now expired. Appeal Br. 12. But the statutory time limitation for past damages is "six years prior to the filing of the complaint." 35 U.S.C. § 286. The patents here expired less than six years ago, so the risk still remains for multiple assignees to seek past damages. Indeed, Appellant has already filed one lawsuit after both patents expired. Appeal Br. 2.

Appellant further argues that the patents "will be maintained by the same owner." Appeal Br. 12. The only basis for this assertion is a single paragraph from a declaration of one inventor:

Because of the exclusive (field-of-use) nature of certain license agreements, MIS/Collect may not freely assign these patents and they have been, and will continue to be, owned by MIS/Collect. As

the Chief Technology Officer and Co-Founder of Micro Imaging Solutions LLC, I can confirm that MIS/Collect will not sell off or split apart any portion of the patents that comprise the '742 Patent family to a third-party.

Adair Decl. ¶ 24 (Sept. 28, 2020). But such a declaration is unpersuasive. For example, suppose Appellant went out of business and a bankruptcy court (not Appellant itself) split the patents among various creditors. Even if Appellant's licensees might have a breach-of-contract claim against the new patent owners, a third party sued by the multiple new owners has no way to enforce the inventor's declaration absent double patenting.

There also is no need to wait until *actual* harassment by multiple assignees. *See* Appeal Br. 9 (“this judicially created doctrine requires . . . harassment by multiple assignees”). One goal of double patenting and terminal disclaimers is to preemptively prevent the risk of such harassment:

Even though both patents are issued to the same patentee or assignee, it (is) possible that ownership of the two will be divided by later transfers and assignments. The possibility of multiple suits against an infringer by assignees of related patents has long been recognized as one of the concerns behind the doctrine of double patenting.

Van Ornum, 686 F.2d at 944 (quoting Chisum on Patents § 9.04(2)(b) (1981)); *see also* Ans. 4.

In sum, the double patenting rejection of the later-issued claims here was proper regardless of whether (A) the PTA is applied before the double

patenting analysis (because the challenged patent's post-PTA expiration date is after that of the reference patent) or (B) the PTA is applied after the double patenting analysis (because despite the pre-PTA expiration dates being the same, the challenged patent is a later-issuing obvious variant still at risk for harassment by multiple assignees).

Substantial New Question

Appellant argues there is no substantial new question of patentability because the examiner in the original prosecution was aware of both applications and “conducted an interference search” for both, so the examiner “would have” made a double patenting rejection “if [the examiner] believed that such a rejection was warranted.” Appeal Br. 20–21, 9–10.

We are not persuaded by Appellant's arguments. A substantial new question of patentability does exist here because there is insufficient evidence that double patenting actually was considered during the original prosecution. Regardless of what ideally should have happened during the original prosecution, the reexamination process exists because items sometimes get overlooked or errors are made. *See, e.g., Patlex Corp. v. Mossinghoff*, 758 F.2d 594, 604 (Fed. Cir. 1985) (“The reexamination statute's purpose is to correct errors made by the government . . . and if need be to remove patents that should never have been granted.”), *on reh'g*, 771 F.2d 480, 481 (Fed. Cir. 1985) (denying the petition in relevant part).

The Examiner also determines that the PTA itself provided a “new light” for a substantial new question of patentability as the amount of PTA, if any, was not known during prosecution. Ans. 4, 9. In the

specific circumstances here, we agree. Generally, a patent term adjustment calculation is performed after the notice of allowance and “the patent term adjustment indicated on the patent is the ‘official’ notification of the Office’s patent term adjustment determination.” MPEP § 2733. Thus, at the time of a notice of allowance, an examiner does not necessarily know whether the resulting patent will receive any PTA or if so how much. Here, the reference patent had already issued in 2002 and been granted 45 days of PTA, whereas the challenged patent did not issue or receive any PTA until 2006. So from 2002 and 2006 (i.e., for most of the prosecution of the application that would result in the challenged patent), the reference patent expired *after* the expected expiration date for the challenged patent (which did not yet have any PTA), not *before* it.

Equity

Appellant argues that “an equitable doctrine should not be applied in a manner that would be inequitable” given that “filing a terminal disclaimer now is not possible as the patents are expired” and “the record is completely devoid” of any “gamesmanship” or “unjustified or improper timewise extension.” Appeal Br. 19–20 (quotation omitted).

However, the Federal Circuit is unambiguous that the inequity here is Appellant’s enjoyment of a second patent’s term beyond the expiration of the first patent:

When the claims of a patent are obvious in light of the claims of an earlier commonly owned patent, the patentee can have no right to exclude others from practicing the invention

encompassed by the later patent after the date of the expiration of the earlier patent. But when a patentee does not terminally disclaim the later patent before the expiration of the earlier related patent, the later patent purports to remain in force even after the date on which the patentee no longer has any right to exclude others from practicing the claimed subject matter. By permitting the later patent to remain in force beyond the date of the earlier patent's expiration, the patentee wrongly purports to inform the public that it is precluded from making, using, selling, offering for sale, or importing the claimed invention during a period after the expiration of the earlier patent.

By failing to terminally disclaim a later patent prior to the expiration of an earlier related patent, a patentee enjoys an unjustified advantage—a purported time extension of the right to exclude from the date of the expiration of the earlier patent. The patentee cannot undo this unjustified timewise extension by retroactively disclaiming the term of the later patent because it has *already* enjoyed rights that it seeks to disclaim.

Boehringer, 592 F.3d at 1347–48 (citations omitted); *see also Lonardo*, 119 F.3d at 965. Appellant also never addresses preserving the public's right to make what is covered by the *earlier* patent after it expired:

The bar against double patenting was created to preserve that bargained-for right held by the public. *See, e.g., Miller v. Eagle Mfg. Co.*, 151 U.S. 186, 197–98, 202 (1894); . . . *Odiorne v. Amesbury Nail Factory*, 18 F.Cas. 578, 579

(C.C.D.Mass.1819). If an inventor could obtain several sequential patents on the same invention, he could retain for himself the exclusive right to exclude or control the public's right to use the patented invention far beyond the term awarded to him under the patent laws. As Justice Story explained in 1819, "[i]t cannot be" that a patentee can obtain two patents in sequence "substantially for the same invention[] and improvements"; "it would completely destroy the whole consideration derived by the public for the grant of the patent, viz. the right to use the invention at the expiration of the term." *Odiorne*, 18 F.Cas. at 579. Thus, the doctrine of double patenting was primarily designed to prevent such harm by limiting a patentee to one patent term per invention or improvement.

Gilead, 753 F.3d at 1212 (parallel citations omitted).

Even beyond the mere existence of the extra term, Appellant concedes that it actively filed at least one lawsuit on the challenged patent after its expiration, yet Appellant fails to address whether that lawsuit seeks damages for the extra term of the challenged patent. *See* Appeal Br. 2.

Moreover, invalidating the challenged claims of a *second* patent (or third, fourth, and fifth patents in the case of the numerous related reexaminations here) does not take away Appellant's right to enforce its *first* patent.

Thus, Appellant fails to persuade us that the result here is inequitable.

Conclusion

Appellant argues both double patenting rejections collectively with no separate arguments based on Harris. Accordingly, we sustain the double patenting rejections of claims 22, 42, 58, and 66.

OUTCOME

The following table summarizes the outcome of the rejection:

Claim(s) Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
22, 42, 58, 66		Double patenting: '369 patent	22, 42, 58, 66	
22, 42, 58, 66		Double patenting: '369 patent and Harris	22, 42, 58, 66	
Overall Outcome			22, 42, 58, 66	

TIME TO RESPOND

Requests for extensions of time in this *ex parte* reexamination proceeding are governed by 37 C.F.R. § 1.550(c). See 37 C.F.R. § 41.50(f).

AFFIRMED

APPENDIX C

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

Appeal 2021-005302
Reexamination Control 90/014,454
Patent 6,424,369 B1
Technology Center 3900

EX PARTE COLLECT LLC, PATENT OWNER AND
APPELLANT

Entered: Dec. 1, 2021

DECISION ON APPEAL

Before JAMESON LEE, ALLEN R. MacDONALD, and
MICHAEL J. ENGLE, *Administrative Patent Judges*.

ENGLE, *Administrative Patent Judge*.

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. §§ 134(b) and 306,
Appellant¹ appeals from the rejection of claims 1, 17,
19, 21, 22, 27, 49, 55, and 61 of U.S. Patent No.
6,424,369 B1 (“the ’369 patent” or “challenged

¹ Appellant states that the real party in interest is “Collect LLC,
a wholly owned subsidiary of Micro Imaging Solutions LLC.”
Appeal Br. 2.

patent”) in this *ex parte* reexamination. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

TECHNOLOGY

The application relates to “solid state image sensors which are configured to be of a minimum size and used within miniature computer systems known as palm top computers, personal digital assistants (PDA), or handheld computers/organize.” ’369 patent, 1:16–21.

RELATED MATTERS

The challenged patent and its patent family have been involved in a number of proceedings before federal district courts and the USPTO. Appeal Br. 2–3 (listing 1 district court case, 20 *inter partes* review petitions, and 5 *ex parte* reexamination requests). Four of the reexaminations involve substantially similar issues on double patenting. *See* Appeal Nos. 2021-005046; 2021-005258; 2021-005302; 2021-005303.

For the challenged patent, three petitions for *inter partes* review were denied institution because “the scope of the claims cannot be determined without undue speculation.” IPR2020-00562, Paper 14, at 20 (July 21, 2020); IPR2020-00563, Paper 14, at 19 (July 21, 2020); IPR2020-00564, Paper 14, at 19–20 (July 21, 2020). As it was not raised in the present proceeding, we do not address indefiniteness here.

REJECTIONS

Claims 1, 17, 19, 21, 22, 27, 49, 55, and 61 of the ’369 patent are rejected for non-statutory double patenting over claims 1, 17, 19, 21, 22, 27, and 33 of

U.S. Patent No. 6,862,036 (“the ’036 patent”) in view of Tran (US 6,202,060 B1; Mar. 13, 2001). Final Act. 5–39.

Claims 1, 17, 19, 21, 22, 27, 49, 55, and 61 of the ’369 patent are rejected for non-statutory double patenting over claims 1, 17, 19, 21, 22, 27, 49, 55, and 61 of U.S. Patent No. 6,452,626 (“the ’626 patent”) in view of admitted prior art. Final Act. 40–60.

ISSUE

Did the Examiner err in applying an obviousness-type double patenting rejection to two related patents that (1) claim the same priority date, (2) have different patent term adjustments, and (3) are expired?

ANALYSIS

Standard of Review

The PTO is “authorized during reexamination to consider the question of double patenting.” *In re Lonardo*, 119 F.3d 960, 966 (Fed. Cir. 1997); *see also* MPEP § 2258(I)(D). “As with statutory obviousness under 35 U.S.C. § 103, obviousness-type double patenting is an issue of law premised on underlying factual inquiries.” *Eli Lilly & Co. v. Teva Parenteral Meds., Inc.*, 689 F.3d 1368, 1376 (Fed. Cir. 2012).

Legal Background on Obviousness-Type Double Patenting, Terminal Disclaimers, PTA, & PTE

Obviousness-type double patenting is a “judicially created” doctrine that “prohibits an inventor from obtaining a second patent for claims that are not patentably distinct from the claims of the first patent.” *Lonardo*, 119 F.3d at 965. “There are two justifications for obviousness-type double patenting”: (1) “to prevent unjustified timewise extension of the

right to exclude granted by a patent no matter how the extension is brought about” and (2) “to prevent multiple infringement suits by different assignees asserting essentially the same patented invention.” *In re Hubbell*, 709 F.3d 1140, 1145 (Fed. Cir. 2013) (quotation omitted). For example, if an inventor receives a second patent with claims that are merely obvious variants of a first patent, double patenting helps prevent the patentee from (1) suing on the second patent after the first has already expired (i.e., improper time-wise extension) or (2) selling the two patents to different entities only to have both entities separately sue an alleged infringer on two obvious variants of each other (i.e., improper harassment by multiple assignees).

A patentee or applicant often can overcome double patenting by filing a terminal disclaimer. *Boehringer Ingelheim Int’l GmbH v. Barr Labs., Inc.*, 592 F.3d 1340, 1346 (Fed. Cir. 2010). Terminal disclaimers are expressly permitted by statute to “disclaim or dedicate to the public . . . any terminal part of the term” of a patent. 35 U.S.C. § 253(b). The USPTO has provided regulations on what a terminal disclaimer must contain to be effective. *E.g.*, 37 C.F.R. § 1.321. A terminal disclaimer solves the two concerns of double patenting by (1) making the *later* patent expire with the *earlier* patent and (2) rendering the second patent unenforceable if it is not commonly owned with the first patent. *E.g.*, 37 C.F.R. § 1.321(b)(2), (c)(3), (d)(3); MPEP §§ 804.02(VI), 1490(VI)(A), (IX). However, “a terminal disclaimer filed after the expiration of the earlier patent over which claims have been found obvious cannot cure obviousness-type double patenting.” *Boehringer*, 592 F.3d at 1347–48. Thus, a terminal disclaimer cannot

cure any double patenting rejection against the expired patents here. Appeal Br. 17–18.

For two issued patents, double patenting and the need for a terminal disclaimer generally only apply to the *later* patent.² See *Eli Lilly & Co. v. Barr Labs., Inc.*, 251 F.3d 955, 968 & n.5 (Fed. Cir. 2001) (“A *later* claim that is not patentably distinct from an earlier claim in a commonly owned patent is invalid for obvious-type double patenting.”; “A patent owner cannot avoid double patenting by disclaiming the *earlier* patent.” (emphases added)). The question then is how to determine which patent is “later.” The answer depends on whether the patents issued from applications filed on or after June 8, 1995. This date is six months after enactment of the Uruguay Round Agreements Act (“URAA”), which changed the term of a patent from (A) 17 years after issue to (B) 20 years from the earliest filing date of any non-provisional U.S. application to which that patent claims priority. 35 U.S.C. § 154.

For two post-URAA patents, the “later” patent generally is determined by looking at the *expiration* date. *Novartis Pharms. Corp. v. Breckenridge Pharm. Inc.*, 909 F.3d 1355, 1362–63, 1366 (Fed. Cir. 2018). For two pre-URAA patents or certain scenarios involving one patent on each side of the URAA date, the “later” patent is instead determined by looking at the *issue* date. *Id.* at 1362 (“Traditionally, courts looked at the issuance dates of the respective patents, because, under the law pre-URAA, the expiration date

² For two co-pending applications, a provisional double patenting rejection against both applications may be appropriate if it is not yet known which will result in the later patent. See MPEP § 804(I)(1).

of the patent was inextricably intertwined with the issuance date, and used the earlier-issued patent to limit the patent term(s) of the later issued patent(s).”). Prior to the URAA, a patent expired 17 years after issuance, so “looking to patent issue dates had previously served as a reliable stand-in for the date that really mattered—patent expiration.” *Gilead Scis., Inc. v. Natco Pharma Ltd.*, 753 F.3d 1208, 1215 (Fed. Cir. 2014). Finally, if two post-URAA patents expire on the same day or two pre-URAA patents have the same issue date, then the patent with the higher patent number may be invalid for double patenting.³ *See Underwood v. Gerber*, 149 U.S. 224 (1893) (affirming Patent No. 348,073 was void over the same inventors’ Patent No. 348,072 when both patents had the same filing date, issue date, and expiration date).

A complication arises, however, in that Congress also provided two ways to potentially prolong the term of a patent. A patent term adjustment (“PTA”) under § 154(b) may adjust the term based on certain delays by the USPTO during prosecution, and a patent term extension (“PTE”) under § 156 may extend the term based on certain regulatory delays, such as the FDA reviewing a new drug. 35 U.S.C. §§ 154(b), 156. The question before us now is how a PTA under § 154 should factor into the double patenting analysis, such as whether double patenting should be based on the expiration date *before* a PTA or *after*. The Federal

³ As the patents here issued on different dates, we need not resolve whether an analysis for patents issued on the same day should first look to priority date or filing date rather than patent number (e.g., two pre-URAA patents with the same issue date but the patent with the higher patent number has a significantly earlier filing date and priority date).

Circuit already addressed similar questions for a PTE, yet it did so by contrasting the statutes for PTE (§ 156) versus PTA (§ 154). We discuss these cases below.

PTE & Terminal Disclaimers
(*Merck v. Hi-Tech*)

For a PTE under § 156, the starting point is *Merck & Co. v. Hi-Tech Pharmacal Co.*, 482 F.3d 1317 (Fed. Cir. 2007). In that case, the patent owner had already filed a terminal disclaimer to overcome an obviousness-type double patenting rejection. 482 F.3d at 1318–19. Later, the patent was awarded a PTE under § 156. *Id.* at 1319. The question before the court was whether a PTE under § 156 could be applied to a patent subject to a terminal disclaimer. *Id.* at 1324. The court held “a patent term extension under § 156 is not foreclosed by a terminal disclaimer.” *Id.* at 1322. In particular, “[t]he computation of a Hatch–Waxman patent term extension is from the expiration date resulting from the terminal disclaimer and not from the date the patent would have expired in the absence of the terminal disclaimer.” *Id.* at 1322–23. Put another way, a PTE under § 156 is applied *after* any terminal disclaimer.

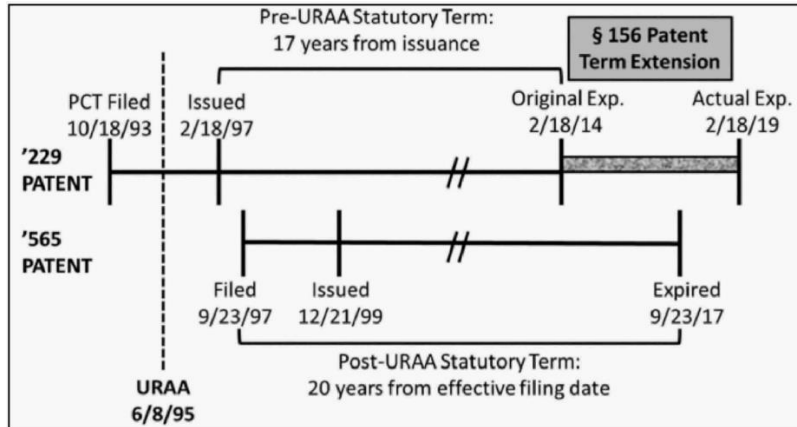
The Federal Circuit reached this conclusion by contrasting PTE with PTA. For a PTA, “§ 154(b)(2)(B) expressly excludes patents in which a terminal disclaimer was filed from the benefit of a term adjustment for PTO delays.” *Merck v. Hi-Tech*, 482 F.3d at 1322. Specifically, the statute states that “[n]o patent the term of which has been disclaimed beyond a specified date may be adjusted under this section beyond the expiration date specified in the disclaimer.” 35 U.S.C. § 154(b)(2)(B). The Federal Circuit explained that “[t]here is no similar provision

that excludes patents in which a terminal disclaimer was filed from the benefits of Hatch-Waxman extensions” under § 156. *Merck v. Hi-Tech*, 482 F.3d at 1322. Thus, a terminal disclaimer is applied *before* a PTE *because* PTE is different than PTA.

PTE & Double Patenting
(*Novartis v. Ezra*)

The next question was how a PTE applied to double patenting in the absence of a terminal disclaimer. As noted above, a terminal disclaimer generally is filed to overcome obviousness-type double patenting. *In re Van Ornum*, 686 F.2d 937, 948 (CCPA 1982); 37 C.F.R. § 1.321(c), (d); MPEP § 1490(II); *see also* Reply Br. 12. Given this relationship between double patenting and terminal disclaimers and given the holding in *Merck v. Hi-Tech* that a terminal disclaimer applies *before* a PTE, the Federal Circuit not surprisingly held “as a logical extension of our holding in *Merck & Co. v. Hi-Tech*” that double patenting also should be considered *before* a PTE. *Novartis AG v. Ezra Ventures LLC*, 909 F.3d 1367, 1373–74 (Fed. Cir. 2018). Thus, “if a patent, under its original expiration date without a PTE, should have been (but was not) terminally disclaimed because of obviousness-type double patenting, then this court’s obviousness-type double patenting case law would apply, and the patent could be invalidated.” *Id.* at 1374. “However, if a patent, under its pre-PTE expiration date, is valid under all other provisions of law, then it is entitled to the full term of its PTE.” *Id.*

A timeline for the patents in *Novartis v. Ezra* is reproduced below:



Novartis v. Ezra, 909 F.3d at 1370. As shown in the timeline above, the challenged patent (the '229 patent) had an *earlier* filing date, issue date, and pre-PTE expiration date than the reference patent (the '565 patent). Because the challenged patent was the *earlier* patent (at least pre-PTE), the challenged patent was not invalid for double patenting. *Id.* at 1373–75.

PTA & Double Patenting

The question now before us is how a PTA affects double patenting. Appellant relies on one broadly worded sentence in *Novartis v. Ezra* to argue that “a judge-made doctrine” (i.e., obviousness-type double patenting) cannot “cut off a statutorily-authorized time extension.” Appeal Br. 10 (quoting *Novartis v. Ezra*, 909 F.3d at 1375). Although the holding in *Novartis v. Ezra* was about a PTE under § 156, Appellant extends that argument to suggest that any PTA under § 154 also is a “statutory grant of additional term” that “cannot be deemed improper.” *Id.* at 13.

Appellant's argument is not persuasive because it ignores the plain text of § 154 and the actual holding in *Novartis v. Ezra*.

First, contrary to Appellant's assertions, the decision in *Novartis v. Ezra* reaffirms that a double patenting analysis *should* be done even if a patent has a PTE. The real question was whether double patenting should be considered *before* or *after* a PTE, with the court ultimately deciding double patenting should be considered *before* a PTE. *Novartis v. Ezra*, 909 F.3d at 1374 (“if a patent, under its original expiration date without a PTE, should have been (but was not) terminally disclaimed because of obviousness-type double patenting, then this court's obviousness-type double patenting case law would apply, and the patent could be invalidated”). So here, we must do a double patenting analysis and the question is whether double patenting should be considered with the expiration dates *before* or *after* a PTA.

Second, the outcome for a PTE under § 156 in *Merck v. Hi-Tech* was based on the difference between § 156 and § 154. In particular, “§ 154(b)(2)(B) expressly excludes patents in which a terminal disclaimer was filed from the benefit of a term adjustment for PTO delays,” but there is an “absence of any such prohibition regarding Hatch-Waxman extensions” under § 156. *Merck v. Hi-Tech*, 482 F.3d at 1322. That reasoning in *Merck v. Hi-Tech* was important enough that when summarizing the prior case, *Novartis v. Ezra* repeated the prior case's “contrast between § 156 for PTE with the language of § 154 for patent term adjustments.” *Novartis v. Ezra*, 909 F.3d at 1373–74. Thus, the rule in *Merck v. Hi-*

Tech and *Novartis v. Ezra* for when to apply a PTE does not apply to a PTA because those decisions were premised on the contrast between PTE and PTA.

Third, the statutory language in § 154 is clear that any terminal disclaimer should be applied *after* any PTA (i.e., a PTA cannot adjust a term beyond the expiration date in any disclaimer). 35 U.S.C. § 154(b)(2)(B) (“No patent the term of which has been disclaimed beyond a specified date may be adjusted under this section beyond the expiration date specified in the disclaimer.”). Although Appellant asserts that the statute says the term “shall” be extended (Reply Br. 8), Appellant omits that all of those sentences are prefaced with the phrase “Subject to the limitations under paragraph (2),” which includes the limitations due to terminal disclaimers. *Id.* § 154(b)(1)(A), (B), (C). Thus, as recognized by *Merck v. Hi-Tech* and *Novartis v. Ezra*, the statute itself is clear that unlike a PTE under § 156, a PTA under § 154 shall *not* extend the term of a patent past the date of any terminal disclaimer.

Fourth, given that terminal disclaimers arise almost exclusively to overcome obviousness-type double patenting, Congress expressly addressing terminal disclaimers in § 154 is tantamount to addressing obviousness-type double patenting. See *Van Ornum*, 686 F.2d at 948; 37 C.F.R. § 1.321(c), (d); MPEP § 1490(II). Indeed, *Novartis v. Ezra* itself recognized that a rule for terminal disclaimers (from *Merck v. Hi-Tech*) should also apply to obviousness-type double patenting as “a logical extension.” 909 F.3d at 1373. The *Novartis v. Ezra* court rejected the argument “that the *Merck* court’s rationale only spoke to the impact of a new PTE on preexisting terminal

disclaimers,” instead finding that the prior “holding on the validity of a PTE for a patent that was terminally disclaimed *in order to overcome an obviousness-type double patenting rejection* is directly relevant to the instant case.” *Id.* at 1374 (quotation omitted). Obviousness-type double patenting and terminal disclaimers are two sides of the same coin: the problem and the solution. Just as *Novartis v. Ezra* found a rule on terminal disclaimers was “directly relevant” to double patenting and therefore applied that rule to double patenting as “a logical extension,” so too we hold that the statutory rule for terminal disclaimers in § 154 is directly relevant to double patenting and we apply that same rule to double patenting as a logical extension.

Indeed, in this case, Appellant itself argues that double patenting should be applied to post-PTA dates. In particular, Appellant argues that “the ’626 Patent cannot be used as an obviousness-type double patenting reference because the ’626 Patent expired after the ’369 Patent” (Appeal Br. 10 n.1) despite that “the ’369 Patent . . . and ’626 Patent . . . have the same expiration date except for statutorily-authorized PTA.” Appeal Br. 7.

Finally, the Federal Circuit also previously said that “another crucial purpose of the doctrine” of double patenting was “to prevent an inventor from securing a second, later expiring patent” for “[p]atents . . . filed at the same time” that “have different patent terms due to examination delays at the PTO” under “§ 154(b) (patent term adjustments).” *AbbVie Inc. v. Mathilda & Terence Kennedy Inst. of Rheumatology Tr.*, 764 F.3d 1366, 1373 (Fed. Cir. 2014); *see also In re Fallaux*, 564 F.3d 1313, 1319 (Fed. Cir. 2009) (“In

some cases there may still be the possibility of an unjust time-wise extension of a patent arising from patent term adjustment under § 154 or patent term extension under § 156.”). That is precisely the scenario we have here where two patents have the same effective filing date but expire at different times due solely to PTAs.

Appellant provides no plausible reason for ignoring the clear statutory text and the contrast between § 154 and § 156 that formed the basis of *Merck v. Hi-Tech* and *Novartis v. Ezra*. Nor has Appellant provided any reason for applying the *post*-PTA date for terminal disclaimers yet the *pre*-PTA date for double patenting.⁴ We therefore hold that both obviousness-type double patenting and terminal disclaimers should be considered *after* any PTA.⁵

*The District Court Decision in
Mitsubishi Is Not Persuasive*

Appellant also cites a district court decision in *Mitsubishi Tanabe Pharma Corp. v. Sandoz, Inc.*,

⁴ Applying different dates for double patenting versus terminal disclaimers also creates inconsistent results. For example, suppose the *pre*-PTA expiration date of Patent A is 1 day after Patent B. Therefore, Patent B could be used as a double patenting reference (*pre*-PTA) against Patent A, and a terminal disclaimer (*post*-PTA) would wipe out *all* PTA on Patent A. However, Patent A could *not* be used as a double patenting reference (*pre*-PTA) against Patent B, so Patent B could have an unlimited amount of PTA, even long after the expiration of Patent A.

⁵ 35 U.S.C. § 154(b)(3)(A) gives the Director some discretion “establishing procedures for the application for and determination of patent term adjustments.” Because we decide the case based on the reasoning above, we need not decide whether that discretion includes the PTA issues here.

No. 3:17-cv-05319, __ F. Supp. 3d __, 2021 WL 1845499, at *27–30 (D.N.J. Mar. 22, 2021). Appeal Br. 13–17. We do not find Appellant’s citation to *Mitsubishi* persuasive. *See also* Ans. 10.

First, an earlier district court decision in the Western District of Michigan came out the opposite way from *Mitsubishi*. *Magna Elecs., Inc. v. TRW Automotive Holdings Corp.*, No. 12-cv-654, 2015 WL 11430786 (W.D. Mich. Dec. 10, 2015). Although the *Magna Electronics* case appears to have settled prior to any appeal, we understand that the decision in *Mitsubishi* is currently on appeal to the Federal Circuit (No. 21-1876; filed Apr. 23, 2021).

Second, the *Mitsubishi* district court never addressed that double patenting applies even to two patents that have the same filing date, the same issue date, and the same expiration date. *Underwood*, 149 U.S. 224. For example, a terminal disclaimer is still needed to ensure that two patents remain commonly owned. *See Sandy MacGregor Co. v. Vaco Grip Co.*, 2 F.2d 655, 657 (6th Cir. 1924) (“in *Underwood v. Gerber* it was thought that the splitting up of one indivisible right into two and subjecting the infringer to suits by two different owners of the right infringed justified applying the defense of double patenting as against two patents issued on the same day”); *Van Ornum*, 686 F.2d at 945 (similarly summarizing *Underwood*).

Third, the district court’s entire discussion of the difference between § 154 and § 156 is relegated to a single footnote in which the court does not appear to have understood that a terminal disclaimer is the standard way to cure double patenting, thereby overlooking why the Federal Circuit decided a rule for terminal disclaimers (*Merck v. Hi-Tech*) should also

apply to a double patenting analysis (*Novartis v. Ezra*) as a “logical extension.” See *Mitsubishi*, 2021 WL 1845499, at *29 n.45.

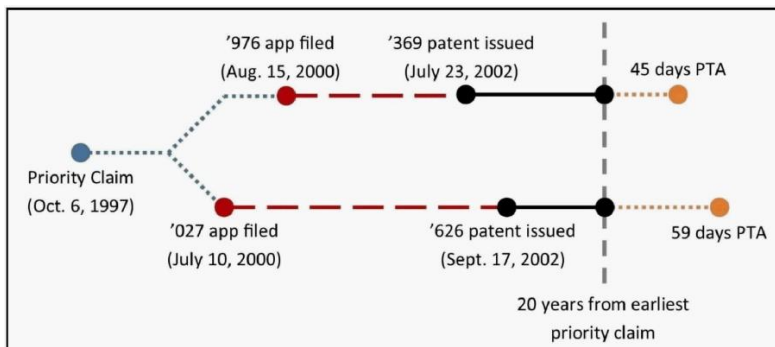
Fourth, even within the same paragraph, the district court confuses when the challenged patent would have expired relative to the reference patent. Compare *Mitsubishi*, 2021 WL 1845499, at *29 (“absent the PTA granted to the ’788 Patent, both the ’788 Patent and the ’219 Patent would have the same expiration date”), with *id.* (“but for the § 154(b) PTA, the ’788 Patent would have expired before the ’219 Patent”). So it is not clear whether the district court was even considering the right facts.

For these reasons, we give little weight to the *Mitsubishi* decision.

*The ’626 Patent Is Not a Valid
Reference for Double Patenting*

Appellant argues that “the ’626 Patent cannot be used as an obviousness-type double patenting reference because the ’626 Patent expired after the ’369 Patent.” Appeal Br. 10.

We agree with Appellant. The timeline below shows the relevant dates for the ’369 patent (on top) and ’626 patent (on bottom):



*Timeline for expiration of '369 patent (top)
& '626 patent (bottom)*

As clearly illustrated in the timeline, the challenged patent (the '369 patent) and the '626 patent (one of the two reference patents) come from the same patent family and claim priority to the same date (October 6, 1997). However, the '626 patent expired *after* the challenged patent due to having more PTA (59 days vs. 45 days). For two patents with different expiration dates, double patenting only invalidates the later patent, whereas here the challenged patent is the *earlier* patent and the '626 patent is the *later* patent.

Even if we were to consider double patenting before applying any PTA, the pre-PTA expiration date of the '626 patent and the challenged patent is the same day yet the '626 patent issued *after* the challenged patent, so the '626 patent still would be the *second* patent and therefore not eligible as a double patenting reference against the *first* patent.

The Examiner appears to rely on the claims of the '626 patent not being entitled to the 1997 priority date due to intervening continuations-in-part. *See* Ans. 8–10. However, we agree with Appellant that “Title 35 is clear that patent term runs from the earliest [non-

provisional U.S.] filing date to which priority is claimed,” and the “term is not affected by whether or not the priority application actually supports . . . [the] claims.” Appeal Br. 6, 9–10. By statute, the only question for an expiration date is “if the application *contains a specific reference to* an earlier filed application” under 35 U.S.C. §§ 120, 121, 365(c), or 386(c). 35 U.S.C. § 154(a)(2) (emphasis added). The statute does not require that any claim actually be entitled to that earlier date. *See Nat. Alternatives Int’l, Inc. v. Iancu*, 904 F.3d 1375, 1383 (Fed. Cir. 2018) (“the standard patent term is twenty years after an application’s *earliest-claimed* priority date,” even if “claims reciting new matter are not entitled to the parent application’s earlier filing date”). Here, the ’626 patent contains a specific reference to the earlier “application No. 08/944,322, filed on Oct. 6, 1997, now Pat. No. 5,929,901” as a continuation-in-part under § 120, which is all that is required by § 154(a)(2). ’626 patent, code (63), 1:5–13.

We therefore do not sustain the rejection over the ’626 patent.

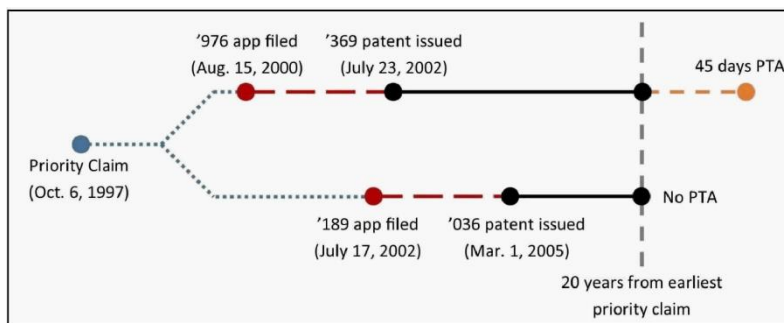
Overview of the ’036 Patent Rejection

We next turn to the rejection over the ’036 patent. Although the challenged patent (the ’369 patent) issued before the ’036 patent, both patents again come from the same patent family and both claim priority to the same application (filed Oct. 6, 1997) so they normally would expire at the same time (Oct. 6, 2017).⁶ 35 U.S.C. § 154(a)(2). However, due to various

⁶ We need not address Appellant’s argument over whether the claims of the ’369 patent are actually entitled to the 1997 date. Appeal Br. 23–25. As discussed above for the ’626 patent, expiration is based on a priority date “if the application *contains a specific reference to an earlier filed*

delays by the USPTO during prosecution, the '369 patent was granted a patent term adjustment (“PTA”) under 35 U.S.C. § 154(b) of 45 days, whereas the '036 patent did not receive any PTA. Therefore, the '036 patent expired *before* the challenged patent. Both patents are now expired, but the statute of limitations for past damages has not yet passed. 35 U.S.C. § 286.

The timeline below shows the relevant dates for the two patents, including priority, filing, issuance, expiration, and PTA, with the challenged patent on top and the '036 patent below:



*Timeline for expiration of '369 patent (top)
& '036 patent (bottom)*

In this reexamination, the examiners invoked the doctrine of obviousness-type double patenting to reject the claims of the challenged patent as obvious variants of claims in the '036 patent. Final Act. 5–39. Appellant does not dispute that the claims of the '036 patent would have rendered obvious the claims of the challenged patent. Instead, Appellant argues the '036 patent cannot be used for double patenting because (1) a judicially-created doctrine cannot take away statutorily guaranteed time, especially in light of the

application,” regardless whether any claim is actually entitled to that priority date. 35 U.S.C. § 154(a)(2) (emphasis added).

Federal Circuit's treatment of patent term extensions ("PTE") under 35 U.S.C. § 156, (2) the result would be inequitable given the facts here, and (3) no substantial new question of patentability has been raised because the examiner should have considered double patenting in the original prosecution. *See* Appeal Br. 4–23.

We are not persuaded by Appellant's arguments. First, unlike a PTE under § 156, the statute for a PTA (§ 154) states that any terminal disclaimer should be applied *after* any PTA. Because the primary purpose of a terminal disclaimer is to overcome double patenting, the same rule should apply to double patenting. Second, the result here is not inequitable because the Federal Circuit has said the existence of any extra term of a second patent is itself what is inequitable, and Appellant still enjoyed the entire term of the earliest patent. Third, double patenting is a substantial new question because, regardless of what should have happened in the original prosecution, there is insufficient evidence that the original examiner actually considered double patenting.

Double Patenting Here Was Proper

As discussed above, we hold that double patenting should be considered *after* any PTA is applied. Here, after applying the PTA, the challenged patent expired after the '036 patent due to the challenged patent having 45 days of PTA beyond the expiration date of the '036 patent. Appeal Br. 11. Thus, the later-expiring claims of the challenged patent were properly rejected for obviousness-type double patenting over the earlier-expiring claims of the '036 patent.

Appellant does argue that “there has been no harassment by multiple assignees” because the patents have been commonly owned so far and the patents are now expired. Appeal Br. 13. But the statutory time limitation for past damages is “six years prior to the filing of the complaint.” 35 U.S.C. § 286. The patents here expired less than six years ago, so the risk still remains for multiple assignees to seek past damages. Indeed, Appellant has already filed one lawsuit after both patents expired. Appeal Br. 2.

Appellant further argues that the patents “will be maintained by the same owner.” Appeal Br. 13. The only basis for this assertion is a single paragraph from a declaration of one inventor:

Because of the exclusive (field-of-use) nature of certain license agreements, MIS/Collect may not freely assign these patents and they have been, and will continue to be, owned by MIS/Collect. As the Chief Technology Officer and Co-Founder of Micro Imaging Solutions LLC, I can confirm that MIS/Collect will not sell off or split apart any portion of the patents that comprise the '369 Patent family to a third-party.

Adair Decl. ¶ 24 (Sept. 30, 2020). But such a declaration is unpersuasive. For example, suppose Appellant went out of business and a bankruptcy court (not Appellant itself) split the patents among various creditors. Even if Appellant’s licensees might have a breach-of-contract claim against the new patent owners, a third party sued by the multiple new owners has no way to enforce the inventor’s declaration absent double patenting.

There also is no need to wait until *actual* harassment by multiple assignees. *See* Appeal Br. 9 (“this judicially created doctrine requires . . . harassment by multiple assignees”). One goal of double patenting and terminal disclaimers is to preemptively prevent the risk of such harassment:

Even though both patents are issued to the same patentee or assignee, it (is) possible that ownership of the two will be divided by later transfers and assignments. The possibility of multiple suits against an infringer by assignees of related patents has long been recognized as one of the concerns behind the doctrine of double patenting.

Van Ornum, 686 F.2d at 944 (quoting Chisum on Patents § 9.04(2)(b) (1981)).

In sum, the double patenting rejection here was proper because any PTA is applied before the double patenting analysis and here the challenged patent’s post-PTA expiration date is after that of the ’036 patent.

Substantial New Question

Appellant argues there is no substantial new question of patentability because the examiner in the original prosecution was aware of both applications and “conducted an interference search” for both, so the examiner “would have” made a double patenting rejection “if [the examiner] believed that such a rejection was warranted.” Appeal Br. 12, 22–23.

We are not persuaded by Appellant’s arguments. A substantial new question of patentability does exist here because there is insufficient evidence that double patenting actually was considered during the original

prosecution. Ans. 14–15. Regardless of what ideally should have happened during the original prosecution, the reexamination process exists because items sometimes get overlooked or errors are made. *See, e.g., Patlex Corp. v. Mossinghoff*, 758 F.2d 594, 604 (Fed. Cir. 1985) (“The reexamination statute’s purpose is to correct errors made by the government . . . and if need be to remove patents that should never have been granted.”), *on reh’g*, 771 F.2d 480, 481 (Fed. Cir. 1985) (denying the petition in relevant part).

Equity

Appellant argues that “an equitable doctrine should not be applied in a manner that would be inequitable” given that “filing a terminal disclaimer now is not possible as the patents are expired” and “the record is completely devoid” of any “gamesmanship” or “unjustified or improper timewise extension.” Appeal Br. 21–22 (quotation omitted).

However, the Federal Circuit is unambiguous that the inequity here is Appellant’s enjoyment of a second patent’s term beyond the expiration of the first patent:

When the claims of a patent are obvious in light of the claims of an earlier commonly owned patent, the patentee can have no right to exclude others from practicing the invention encompassed by the later patent after the date of the expiration of the earlier patent. But when a patentee does not terminally disclaim the later patent before the expiration of the earlier related patent, the later patent purports to remain in force even after the date on which the patentee no longer has any right to exclude others from

practicing the claimed subject matter. By permitting the later patent to remain in force beyond the date of the earlier patent's expiration, the patentee wrongly purports to inform the public that it is precluded from making, using, selling, offering for sale, or importing the claimed invention during a period after the expiration of the earlier patent.

By failing to terminally disclaim a later patent prior to the expiration of an earlier related patent, a patentee enjoys an unjustified advantage—a purported time extension of the right to exclude from the date of the expiration of the earlier patent. The patentee cannot undo this unjustified timewise extension by retroactively disclaiming the term of the later patent because it has *already* enjoyed rights that it seeks to disclaim.

Boehringer, 592 F.3d at 1347–48 (citations omitted); *see also Lonardo*, 119 F.3d at 965. Appellant also never addresses preserving the public's right to make what is covered by the *earlier* patent after it expired:

The bar against double patenting was created to preserve that bargained-for right held by the public. *See, e.g., Miller v. Eagle Mfg. Co.*, 151 U.S. 186, 197–98, 202 (1894); . . . *Odiorne v. Amesbury Nail Factory*, 18 F.Cas. 578, 579 (C.C.D.Mass.1819). If an inventor could obtain several sequential patents on the same invention, he could retain for himself the exclusive right to exclude or control the public's right to use the patented invention far beyond the term awarded to him under the patent laws. As Justice Story explained in 1819, “[i]t cannot be” that a patentee

can obtain two patents in sequence “substantially for the same invention[] and improvements”; “it would completely destroy the whole consideration derived by the public for the grant of the patent, viz. the right to use the invention at the expiration of the term.” *Odiorne*, 18 F.Cas. at 579. Thus, the doctrine of double patenting was primarily designed to prevent such harm by limiting a patentee to one patent term per invention or improvement.

Gilead, 753 F.3d at 1212 (parallel citations omitted).

Even beyond the mere existence of the extra term, Appellant concedes that it actively filed at least one lawsuit on the challenged patent after the expiration of both patents, yet Appellant fails to address whether that lawsuit seeks damages for the extra term of the challenged patent. *See* Appeal Br. 2.

Moreover, invalidating the challenged claims of a *second* patent (or third, fourth, and fifth patents in the case of the numerous related reexaminations here) does not take away Appellant’s right to enforce its *first* patent.

Thus, Appellant fails to persuade us that the result here is inequitable.

Conclusion on ’036 Patent Rejection

Accordingly, we sustain the double patenting rejection of claims 1, 17, 19, 21, 22, 27, 49, 55, and 61 over certain claims of the ’036 Patent and Tran.

OUTCOME

The following table summarizes the outcome of the rejection:

Claim(s) Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 17, 19, 21, 22, 27, 49, 55, 61		Double patenting: '036 patent and Tran	1, 17, 19, 21, 22, 27, 49, 55, 61	
1, 17, 19, 21, 22, 27, 49, 55, 61		Double patenting: '626 patent and APA		1, 17, 19, 21, 22, 27, 49, 55, 61
Overall Outcome			1, 17, 19, 21, 22, 27, 49, 55, 61	

TIME TO RESPOND

Requests for extensions of time in this *ex parte* reexamination proceeding are governed by 37 C.F.R. § 1.550(c). See 37 C.F.R. § 41.50(f).

AFFIRMED

APPENDIX D

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

Appeal 2021-005046
Reexamination Control 90/014,455
Patent 6,452,626 B1
Technology Center 3900

EX PARTE COLLECT LLC, PATENT OWNER AND
APPELLANT

Entered: Dec. 1, 2021

DECISION ON APPEAL

Before JAMESON LEE, ALLEN R. MacDONALD, and
MICHAEL J. ENGLE, *Administrative Patent Judges*.

ENGLE, *Administrative Patent Judge*.

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. §§ 134(b) and 306,
Appellant¹ appeals from the rejection of claims 1, 5,
11, 33, 34, 58, and 64 of U.S. Patent No. 6,452,626 B1
("the '626 patent" or "challenged patent") in this *ex*

¹ Appellant states that the real party in interest is "Collect LLC,
a wholly owned subsidiary of Micro Imaging Solutions LLC."
Appeal Br. 2.

parte reexamination. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

TECHNOLOGY

The application relates to “solid state image sensors which are configured to be of a minimum size and used within communication devices specifically including video telephones.” ’626 patent, 1:16–20.

RELATED MATTERS

The challenged patent and its patent family have been involved in a number of proceedings before federal district courts and the USPTO. Appeal Br. 2–3 (listing 1 district court case, 20 *inter partes* review petitions, and 5 *ex parte* reexamination requests); Final Act. 4 (listing another district court case). Four of the reexaminations involve substantially similar issues on double patenting. *See* Appeal Nos. 2021-005046; 2021-005258; 2021-005302; 2021-005303.

For the challenged patent, three petitions for *inter partes* review were denied institution because “the scope of [the] challenged claims . . . is uncertain.” IPR2020-00565, Paper 14, at 17 (Oct. 5, 2020); IPR2020-00566, Paper 14, at 17 (Oct. 5, 2020); IPR2020-00567, Paper 14, at 17 (Oct. 5, 2020). As it was not raised in the present proceeding, we do not address indefiniteness here.

REJECTIONS

Claims 1, 5, 11, 33, 34, 58, and 64 are rejected for non-statutory double patenting over claims 14, 5, 11, 46, 34, 58, and 64 of U.S. Patent No. 6,424,369 (“the ’369 patent” or “reference patent”). Final Act. 8–20.

Claims 1, 5, 11, 33, 34, 58, and 64 are rejected for non-statutory double patenting over claims 14, 5, 11, 46, 34, 58, and 64 of the '369 patent in view of Nguyen (WO 97/09813; Mar. 13, 1997). Final Act. 20–22.

ISSUE

Did the Examiner err in applying an obviousness-type double patenting rejection to two related patents that (1) claim the same priority date, (2) have different patent term adjustments, and (3) are expired?

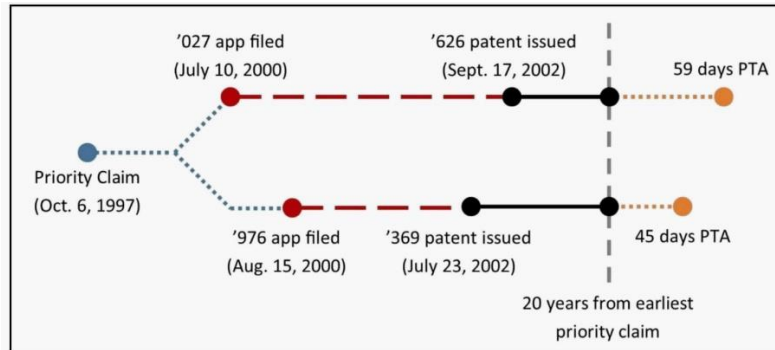
ANALYSIS

Overview

The challenged patent (the '626 patent) and the reference patent (the '369 patent) belong to the same patent family. The challenged patent issued after the reference patent, but both claim priority to the same application (filed Oct. 6, 1997) so they normally would expire at the same time (Oct. 6, 2017).² 35 U.S.C. § 154(a)(2). However, due to various delays by the USPTO during prosecution, both were granted a patent term adjustment (“PTA”) under 35 U.S.C. § 154(b), with the challenged patent receiving more PTA than the reference patent (59 days vs. 45 days). Therefore, the reference patent expired *before* the challenged patent. Both patents are now expired, but the statute of limitations for past damages has not yet passed. 35 U.S.C. § 286.

² We agree with the Examiner that whether the claims are actually entitled to the claimed date is not relevant to a double patenting analysis. Ans. 5; Appeal Br. 17-21. By statute, expiration is based on a priority date “if the application *contains a specific reference to an earlier filed application,*” regardless whether any claim is actually entitled to that priority date. 35 U.S.C. § 154(a)(2) (emphasis added).

The timeline below shows the relevant dates for the two patents, including priority, filing, issuance, expiration, and PTA, with the challenged patent on top and the reference patent below:



*Timeline for expiration of '626 patent (top)
& '369 patent (bottom)*

In this reexamination, the examiners invoked the doctrine of obviousness-type double patenting to reject the claims of the challenged patent as obvious variants of claims in the reference patent, either alone or in combination with Nguyen. Final Act. 7–22. Appellant does not dispute that the claims of the reference patent would have rendered obvious the claims of the challenged patent. Instead, Appellant argues the reference patent cannot be used for double patenting because (1) a judicially-created doctrine cannot take away statutorily guaranteed time, especially in light of the Federal Circuit’s treatment of patent term extensions (“PTE”) under 35 U.S.C. § 156, (2) the result would be inequitable given the facts here, and (3) no substantial new question of patentability has been raised because the examiner should have considered double patenting in the original prosecution. *See* Appeal Br. 4–17.

We are not persuaded by Appellant's arguments. First, unlike a PTE under § 156, the statute for a PTA (§ 154) states that any terminal disclaimer should be applied *after* any PTA. Because the primary purpose of a terminal disclaimer is to overcome double patenting, the same rule should apply to double patenting. Moreover, even if double patenting was based on the expiration date *before* applying any PTA (akin to a PTE), double patenting still would be appropriate here because two patents that are obvious variants and expire on the same day still need a terminal disclaimer to enforce common ownership. Second, the result here is not inequitable because the Federal Circuit has said the existence of any extra term of a second patent is itself what is inequitable, and Appellant still enjoyed the entire term of the earliest patent. Third, double patenting is a substantial new question because, regardless of what should have happened in the original prosecution, there is insufficient evidence that the original examiner actually considered double patenting.

Standard of Review

The PTO is “authorized during reexamination to consider the question of double patenting.” *In re Lonardo*, 119 F.3d 960, 966 (Fed. Cir. 1997); *see also* MPEP § 2258(I)(D); Ans. 6–7. “As with statutory obviousness under 35 U.S.C. § 103, obviousness-type double patenting is an issue of law premised on underlying factual inquiries.” *Eli Lilly & Co. v. Teva Parenteral Meds., Inc.*, 689 F.3d 1368, 1376 (Fed. Cir. 2012).

Legal Background on Obviousness-Type Double Patenting, Terminal Disclaimers, PTA, & PTE

Obviousness-type double patenting is a “judicially created” doctrine that “prohibits an inventor from obtaining a second patent for claims that are not patentably distinct from the claims of the first patent.” *Lonardo*, 119 F.3d at 965. “There are two justifications for obviousness-type double patenting”: (1) “to prevent unjustified timewise extension of the right to exclude granted by a patent no matter how the extension is brought about” and (2) “to prevent multiple infringement suits by different assignees asserting essentially the same patented invention.” *In re Hubbell*, 709 F.3d 1140, 1145 (Fed. Cir. 2013) (quotation omitted). For example, if an inventor receives a second patent with claims that are merely obvious variants of a first patent, double patenting helps prevent the patentee from (1) suing on the second patent after the first has already expired (i.e., improper time-wise extension) or (2) selling the two patents to different entities only to have both entities separately sue an alleged infringer on two obvious variants of each other (i.e., improper harassment by multiple assignees).

A patentee or applicant often can overcome double patenting by filing a terminal disclaimer. *Boehringer Ingelheim Int’l GmbH v. Barr Labs., Inc.*, 592 F.3d 1340, 1346 (Fed. Cir. 2010). Terminal disclaimers are expressly permitted by statute to “disclaim or dedicate to the public . . . any terminal part of the term” of a patent. 35 U.S.C. § 253(b). The USPTO has provided regulations on what a terminal disclaimer must contain to be effective. *E.g.*, 37 C.F.R. § 1.321. A terminal disclaimer solves the two concerns

of double patenting by (1) making the *later* patent expire with the *earlier* patent and (2) rendering the second patent unenforceable if it is not commonly owned with the first patent. *E.g.*, 37 C.F.R. § 1.321(b)(2), (c)(3), (d)(3); MPEP §§ 804.02(VI), 1490(VI)(A), (IX). However, “a terminal disclaimer filed after the expiration of the earlier patent over which claims have been found obvious cannot cure obviousness-type double patenting.” *Boehringer*, 592 F.3d at 1347–48. Thus, a terminal disclaimer cannot cure any double patenting rejection against the expired patents here. Appeal Br. 9.

For two issued patents, double patenting and the need for a terminal disclaimer generally only apply to the *later* patent.³ *See Eli Lilly & Co. v. Barr Labs., Inc.*, 251 F.3d 955, 968 & n.5 (Fed. Cir. 2001) (“A *later* claim that is not patentably distinct from an earlier claim in a commonly owned patent is invalid for obvious-type double patenting.”; “A patent owner cannot avoid double patenting by disclaiming the *earlier* patent.” (emphases added)). The question then is how to determine which patent is “later.” The answer depends on whether the patents issued from applications filed on or after June 8, 1995. This date is six months after enactment of the Uruguay Round Agreements Act (“URAA”), which changed the term of a patent from (A) 17 years after issue to (B) 20 years from the earliest filing date of any non-provisional U.S. application to which that patent claims priority. 35 U.S.C. § 154.

³ For two co-pending applications, a provisional double patenting rejection against both applications may be appropriate if it is not yet known which will result in the later patent. *See* MPEP § 804(I)(1).

For two post-URAA patents, the “later” patent generally is determined by looking at the *expiration* date. *Novartis Pharms. Corp. v. Breckenridge Pharm. Inc.*, 909 F.3d 1355, 1362–63, 1366 (Fed. Cir. 2018). For two pre-URAA patents or certain scenarios involving one patent on each side of the URAA date, the “later” patent is instead determined by looking at the *issue* date. *Id.* at 1362 (“Traditionally, courts looked at the issuance dates of the respective patents, because, under the law pre-URAA, the expiration date of the patent was inextricably intertwined with the issuance date, and used the earlier-issued patent to limit the patent term(s) of the later issued patent(s).”). Prior to the URAA, a patent expired 17 years after issuance, so “looking to patent issue dates had previously served as a reliable stand-in for the date that really mattered—patent expiration.” *Gilead Scis., Inc. v. Natco Pharma Ltd.*, 753 F.3d 1208, 1215 (Fed. Cir. 2014). Finally, if two post-URAA patents expire on the same day or two pre-URAA patents have the same issue date, then the patent with the higher patent number may be invalid for double patenting.⁴ *See Underwood v. Gerber*, 149 U.S. 224 (1893) (affirming Patent No. 348,073 was void over the same inventors’ Patent No. 348,072 when both patents had the same filing date, issue date, and expiration date).

A complication arises, however, in that Congress also provided two ways to potentially prolong the term

⁴ As the patents here issued on different dates, we need not resolve whether an analysis for patents issued on the same day should first look to priority date or filing date rather than patent number (e.g., two pre-URAA patents with the same issue date but the patent with the higher patent number has a significantly earlier filing date and priority date).

of a patent. A patent term adjustment (“PTA”) under § 154(b) may adjust the term based on certain delays by the USPTO during prosecution, and a patent term extension (“PTE”) under § 156 may extend the term based on certain regulatory delays, such as the FDA reviewing a new drug. 35 U.S.C. §§ 154(b), 156. The question before us now is how a PTA under § 154 should factor into the double patenting analysis, such as whether double patenting should be based on the expiration date *before* a PTA or *after*. The Federal Circuit already addressed similar questions for a PTE, yet it did so by contrasting the statutes for PTE (§ 156) versus PTA (§ 154). We discuss these cases below.

PTE & Terminal Disclaimers
(*Merck v. Hi-Tech*)

For a PTE under § 156, the starting point is *Merck & Co. v. Hi-Tech Pharmacal Co.*, 482 F.3d 1317 (Fed. Cir. 2007). In that case, the patent owner had already filed a terminal disclaimer to overcome an obviousness-type double patenting rejection. 482 F.3d at 1318–19. Later, the patent was awarded a PTE under § 156. *Id.* at 1319. The question before the court was whether a PTE under § 156 could be applied to a patent subject to a terminal disclaimer. *Id.* at 1324. The court held “a patent term extension under § 156 is not foreclosed by a terminal disclaimer.” *Id.* at 1322. In particular, “[t]he computation of a Hatch–Waxman patent term extension is from the expiration date resulting from the terminal disclaimer and not from the date the patent would have expired in the absence of the terminal disclaimer.” *Id.* at 1322–23. Put another way, a PTE under § 156 is applied *after* any terminal disclaimer.

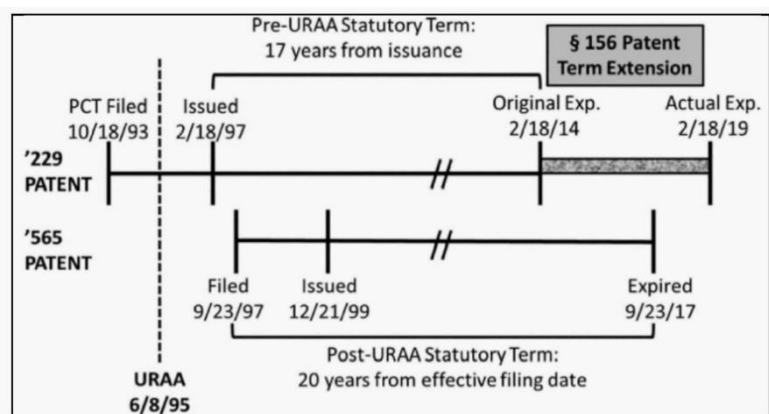
The Federal Circuit reached this conclusion by contrasting PTE with PTA. For a PTA, “§ 154(b)(2)(B) expressly excludes patents in which a terminal disclaimer was filed from the benefit of a term adjustment for PTO delays.” *Merck v. Hi-Tech*, 482 F.3d at 1322. Specifically, the statute states that “[n]o patent the term of which has been disclaimed beyond a specified date may be adjusted under this section beyond the expiration date specified in the disclaimer.” 35 U.S.C. § 154(b)(2)(B). The Federal Circuit explained that “[t]here is no similar provision that excludes patents in which a terminal disclaimer was filed from the benefits of Hatch-Waxman extensions” under § 156. *Merck v. Hi-Tech*, 482 F.3d at 1322. Thus, a terminal disclaimer is applied *before* a PTE *because* PTE is different than PTA.

PTE & Double Patenting
(*Novartis v. Ezra*)

The next question was how a PTE applied to double patenting in the absence of a terminal disclaimer. As noted above, a terminal disclaimer generally is filed to overcome obviousness-type double patenting. *In re Van Ornum*, 686 F.2d 937, 948 (CCPA 1982); 37 C.F.R. § 1.321(c), (d); MPEP § 1490(II). Given this relationship between double patenting and terminal disclaimers and given the holding in *Merck v. Hi-Tech* that a terminal disclaimer applies *before* a PTE, the Federal Circuit not surprisingly held “as a logical extension of our holding in *Merck & Co. v. Hi-Tech*” that double patenting also should be considered *before* a PTE. *Novartis AG v. Ezra Ventures LLC*, 909 F.3d 1367, 1373–74 (Fed. Cir. 2018). Thus, “if a patent, under its original expiration date without a PTE, should have been (but was not) terminally

disclaimed because of obviousness-type double patenting, then this court's obviousness-type double patenting case law would apply, and the patent could be invalidated." *Id.* at 1374. "However, if a patent, under its pre-PTE expiration date, is valid under all other provisions of law, then it is entitled to the full term of its PTE." *Id.*

A timeline for the patents in *Novartis v. Ezra* is reproduced below:



Novartis v. Ezra, 909 F.3d at 1370. As shown in the timeline above, the challenged patent (the '229 patent) had an *earlier* filing date, issue date, and pre-PTE expiration date than the reference patent (the '565 patent). Because the challenged patent was the *earlier* patent (at least pre-PTE), the challenged patent was not invalid for double patenting. *Id.* at 1373–75.

PTA & Double Patenting

The question now before us is how a PTA affects double patenting. Appellant relies on one broadly worded sentence in *Novartis v. Ezra* to argue that “a judge-made doctrine” (i.e., obviousness-type double

patenting) cannot “cut off a statutorily-authorized time extension.” Appeal Br. 11 (quoting *Novartis v. Ezra*, 909 F.3d at 1375). Although the holding in *Novartis v. Ezra* was about a PTE under § 156, Appellant extends that argument to suggest that any PTA under § 154 also is a “statutory grant of additional term” that “cannot be deemed improper.” *Id.*

Appellant’s argument is not persuasive because it ignores the plain text of § 154 and the actual holding in *Novartis v. Ezra*.

First, contrary to Appellant’s assertions, the decision in *Novartis v. Ezra* reaffirms that a double patenting analysis *should* be done even if a patent has a PTE. The real question was whether double patenting should be considered *before* or *after* a PTE, with the court ultimately deciding double patenting should be considered *before* a PTE. *Novartis v. Ezra*, 909 F.3d at 1374 (“if a patent, under its original expiration date without a PTE, should have been (but was not) terminally disclaimed because of obviousness-type double patenting, then this court’s obviousness-type double patenting case law would apply, and the patent could be invalidated”). So here, we must do a double patenting analysis and the question is whether double patenting should be considered with the expiration dates *before* or *after* a PTA.

Second, the outcome for a PTE under § 156 in *Merck v. Hi-Tech* was based on the difference between § 156 and § 154. In particular, “§ 154(b)(2)(B) expressly excludes patents in which a terminal disclaimer was filed from the benefit of a term adjustment for PTO delays,” but there is an “absence

of any such prohibition regarding Hatch-Waxman extensions” under § 156. *Merck v. Hi-Tech*, 482 F.3d at 1322. That reasoning in *Merck v. Hi-Tech* was important enough that when summarizing the prior case, *Novartis v. Ezra* repeated the prior case’s “contrast between § 156 for PTE with the language of § 154 for patent term adjustments.” *Novartis v. Ezra*, 909 F.3d at 1373–74. Thus, the rule in *Merck v. Hi-Tech* and *Novartis v. Ezra* for when to apply a PTE does not apply to a PTA because those decisions were premised on the contrast between PTE and PTA.

Third, the statutory language in § 154 is clear that any terminal disclaimer should be applied *after* any PTA (i.e., a PTA cannot adjust a term beyond the expiration date in any disclaimer). 35 U.S.C. § 154(b)(2)(B) (“No patent the term of which has been disclaimed beyond a specified date may be adjusted under this section beyond the expiration date specified in the disclaimer.”). Although Appellant asserts that the statute says the term “shall” be extended (Reply Br. 6–7), Appellant omits that all of those sentences are prefaced with the phrase “Subject to the limitations under paragraph (2),” which includes the limitations due to terminal disclaimers. *Id.* § 154(b)(1)(A), (B), (C). Thus, as recognized by *Merck v. Hi-Tech* and *Novartis v. Ezra*, the statute itself is clear that unlike a PTE under § 156, a PTA under § 154 shall *not* extend the term of a patent past the date of any terminal disclaimer.

Fourth, given that terminal disclaimers arise almost exclusively to overcome obviousness-type double patenting, Congress expressly addressing terminal disclaimers in § 154 is tantamount to addressing obviousness-type double patenting. *See*

Van Ornum, 686 F.2d at 948; 37 C.F.R. § 1.321(c), (d); MPEP § 1490(II). Indeed, *Novartis v. Ezra* itself recognized that a rule for terminal disclaimers (from *Merck v. Hi-Tech*) should also apply to obviousness-type double patenting as “a logical extension.” 909 F.3d at 1373. The *Novartis v. Ezra* court rejected the argument “that the *Merck* court’s rationale only spoke to the impact of a new PTE on preexisting terminal disclaimers,” instead finding that the prior “holding on the validity of a PTE for a patent that was terminally disclaimed *in order to overcome an obviousness-type double patenting rejection* is directly relevant to the instant case.” *Id.* at 1374 (quotation omitted). Obviousness-type double patenting and terminal disclaimers are two sides of the same coin: the problem and the solution. Just as *Novartis v. Ezra* found a rule on terminal disclaimers was “directly relevant” to double patenting and therefore applied that rule to double patenting as “a logical extension,” so too we hold that the statutory rule for terminal disclaimers in § 154 is directly relevant to double patenting and we apply that same rule to double patenting as a logical extension.

Indeed, in at least one related reexamination, Appellant itself argues that double patenting should be applied to post-PTA dates. *Compare* Appeal 2021-005302, Appeal Br. 7 (“the ’369 Patent . . . and ’626 Patent . . . have the same expiration date except for statutorily-authorized PTA”), *with id.* at 10 n.1 (“the ’626 Patent cannot be used as an obviousness-type double patenting reference because the ’626 Patent expired after the ’369 Patent”). That case applied the same two patents at issue here, just with the roles reversed (i.e., the ’626 patent as the reference patent against the ’369 patent).

Finally, the Federal Circuit also previously said that “another crucial purpose of the doctrine” of double patenting was “to prevent an inventor from securing a second, later expiring patent” for “[p]atents . . . filed at the same time” that “have different patent terms due to examination delays at the PTO” under “§ 154(b) (patent term adjustments).” *AbbVie Inc. v. Mathilda & Terence Kennedy Inst. of Rheumatology Tr.*, 764 F.3d 1366, 1373 (Fed. Cir. 2014); *see also In re Fallaux*, 564 F.3d 1313, 1319 (Fed. Cir. 2009) (“In some cases there may still be the possibility of an unjust time-wise extension of a patent arising from patent term adjustment under § 154 or patent term extension under § 156.”). That is precisely the scenario we have here where two patents have the same effective filing date but expire at different times due solely to PTAs.

Appellant provides no plausible reason for ignoring the clear statutory text and the contrast between § 154 and § 156 that formed the basis of *Merck v. Hi-Tech* and *Novartis v. Ezra*. Nor has Appellant provided any reason for applying the *post*-PTA date for terminal disclaimers yet the *pre*-PTA date for double patenting.⁵ We therefore hold that

⁵ Applying different dates for double patenting versus terminal disclaimers also creates inconsistent results. For example, suppose the *pre*-PTA expiration date of Patent A is 1 day after Patent B. Therefore, Patent B could be used as a double patenting reference (*pre*-PTA) against Patent A, and a terminal disclaimer (*post*-PTA) would wipe out *all* PTA on Patent A. However, Patent A could *not* be used as a double patenting reference (*pre*-PTA) against Patent B, so Patent B could have an unlimited amount of PTA, even long after the expiration of Patent A.

both obviousness-type double patenting and terminal disclaimers should be considered *after* any PTA.⁶

*The District Court Decision in
Mitsubishi Is Not Persuasive*

Appellant also cites a district court decision in *Mitsubishi Tanabe Pharma Corp. v. Sandoz, Inc.*, No. 3:17-cv-05319, ___ F. Supp. 3d ___, 2021 WL 1845499, at *27–30 (D.N.J. Mar. 22, 2021). Supp. Br. 13–17 (Mar. 29, 2021).⁷ We do not find Appellant’s citation to *Mitsubishi* persuasive. *See also* Ans. 19.

First, an earlier district court decision in the Western District of Michigan came out the opposite way from *Mitsubishi*. *Magna Elecs., Inc. v. TRW Automotive Holdings Corp.*, No. 12-cv-654, 2015 WL 11430786 (W.D. Mich. Dec. 10, 2015). Although the *Magna Electronics* case appears to have settled prior to any appeal, we understand that the decision in *Mitsubishi* is currently on appeal to the Federal Circuit (No. 21-1876; filed Apr. 23, 2021).

Second, the *Mitsubishi* district court never addressed that double patenting applies even to two patents that have the same filing date, the same issue date, and the same expiration date. *Underwood*, 149 U.S. 224. For example, a terminal disclaimer is still needed to ensure that two patents remain commonly

⁶ 35 U.S.C. § 154(b)(3)(A) gives the Director some discretion “establishing procedures for the application for and determination of patent term adjustments.” Because we decide the case based on the reasoning above, we need not decide whether that discretion includes the PTA issues here.

⁷ The *Mitsubishi* decision (Mar. 22, 2021) was issued after the Appeal Brief had already been filed (Feb. 16, 2021), so Appellant raised it in a “Supplemental Submission of New Authority Pursuant to MPEP 1205.02” (“Supp. Br.”) dated March 29, 2021.

owned. See *Sandy MacGregor Co. v. Vaco Grip Co.*, 2 F.2d 655, 657 (6th Cir. 1924) (“in *Underwood v. Gerber* it was thought that the splitting up of one indivisible right into two and subjecting the infringer to suits by two different owners of the right infringed justified applying the defense of double patenting as against two patents issued on the same day”); *Van Ornum*, 686 F.2d at 945 (similarly summarizing *Underwood*).

Third, the district court’s entire discussion of the difference between § 154 and § 156 is relegated to a single footnote in which the court does not appear to have understood that a terminal disclaimer is the standard way to cure double patenting, thereby overlooking why the Federal Circuit decided a rule for terminal disclaimers (*Merck v. Hi-Tech*) should also apply to a double patenting analysis (*Novartis v. Ezra*) as a “logical extension.” See *Mitsubishi*, 2021 WL 1845499, at *29 n.45.

Fourth, even within the same paragraph, the district court confuses when the challenged patent would have expired relative to the reference patent. Compare *Mitsubishi*, 2021 WL 1845499, at *29 (“absent the PTA granted to the ’788 Patent, both the ’788 Patent and the ’219 Patent would have the same expiration date”), with *id.* (“but for the § 154(b) PTA, the ’788 Patent would have expired before the ’219 Patent”). So it is not clear whether the district court was even considering the right facts.

Finally, in *Mitsubishi*, the challenged patent issued *before* the reference patent (May 17, 2011 vs. July 17, 2012). 2021 WL 1845499, at *27–28. That is opposite the present case where the challenged patent issued *after* the reference patent. Thus, even if we treated a PTA like PTE and double patenting were

considered *before* a PTA, the outcome here still would be the opposite of *Mitsubishi* because the challenged patent in *Mitsubishi* was the *earlier* patent whereas the challenged patent here is the *later* patent.

For these reasons, we give little weight to the *Mitsubishi* decision.

*Double Patenting Here Was Proper
Regardless When the PTA Is Applied*

As discussed above, we hold that double patenting should be considered *after* any PTA is applied. Here, after applying the PTA, the challenged patent expired after the reference patent (PTA of 59 days vs. 45 days). Appeal Br. 9 (“the ’626 Patent expired 14 days after the ’369 Patent” (emphasis omitted)). Thus, the later-expiring claims of the challenged patent were properly rejected for obviousness-type double patenting over the earlier-expiring claims of the reference patent.

However, even if we treated a PTA like PTE and did a double patenting analysis *before* factoring in any PTA, a double patenting rejection still would be proper here because prior to the PTA, the challenged patent and the reference patent would have expired on the same day (Oct. 6, 2017). *Underwood*, 149 U.S. 224 (affirming a second patent as void when both patents had the same filing date, issue date, and expiration date); *see also* MPEP § 804(I)(B)(1)(b)(ii) (“If both applications are actually filed on the same day, or are entitled to the same earliest effective filing date[,] . . . the provisional nonstatutory double patenting rejection made in each application should be maintained until the rejection is overcome,” such as by “filing a terminal disclaimer in the pending

application.”). Here, the challenged patent is a later-issued patent claiming obvious variants of the earlier-issued reference patent. Even with the same expiration date, double patenting and a terminal disclaimer are still needed to ensure that the later-issued obvious variant retains common ownership with the earlier-issued patent. This is necessary to accomplish double patenting’s second goal “to prevent multiple infringement suits by different assignees asserting essentially the same patented invention.” *Hubbell*, 709 F.3d at 1145; Ans. 15–16 (“regardless whether two relevant patents have different expiration dates,” “the ODP rejection would still be advanced to prevent possible harassment by multiple assignees”); see also *Sandy MacGregor*, 2 F.2d at 657 (“in *Underwood v. Gerber* it was thought that the splitting up of one indivisible right into two and subjecting the infringer to suits by two different owners of the right infringed justified applying the defense of double patenting as against two patents issued on the same day”); see also *Van Ornum*, 686 F.2d at 945 (similarly summarizing *Underwood*). Appellant never addresses that double patenting applies to patents with the same expiration date.

Appellant does argue that “there has been no harassment by multiple assignees” because the patents have been commonly owned so far and the patents are now expired. Appeal Br. 11. But the statutory time limitation for past damages is “six years prior to the filing of the complaint.” 35 U.S.C. § 286. The patents here expired less than six years ago, so the risk still remains for multiple assignees to seek past damages. Indeed, Appellant has already filed one lawsuit after both patents expired. Appeal Br. 2.

Appellant further argues that the patents “will be maintained by the same owner.” Appeal Br. 11. The only basis for this assertion is a single paragraph from a declaration of one inventor:

Because of the exclusive (field-of-use) nature of certain license agreements, MIS/Collect may not freely assign these patents and they have been, and will continue to be, owned by MIS/Collect. As the Chief Technology Officer and Co-Founder of Micro Imaging Solutions LLC, I can confirm that MIS/Collect will not sell off or split apart any portion of the patents that comprise the '626 Patent family to a third-party.

Adair Decl. ¶ 24 (Sept. 8, 2020). But such a declaration is unpersuasive. For example, suppose Appellant went out of business and a bankruptcy court (not Appellant itself) split the patents among various creditors. Even if Appellant’s licensees might have a breach-of-contract claim against the new patent owners, a third party sued by the multiple new owners has no way to enforce the inventor’s declaration absent double patenting.

There also is no need to wait until *actual* harassment by multiple assignees. *See* Appeal Br. 8 (“this judicially created doctrine requires . . . harassment by multiple assignees”). One goal of double patenting and terminal disclaimers is to preemptively prevent the risk of such harassment:

Even though both patents are issued to the same patentee or assignee, it (is) possible that ownership of the two will be divided by later transfers and assignments. The possibility of multiple suits against an infringer by assignees

of related patents has long been recognized as one of the concerns behind the doctrine of double patenting.

Van Ornum, 686 F.2d at 944 (quoting Chisum on Patents § 9.04(2)(b) (1981)); *see also* Ans. 8.

In sum, the double patenting rejection of the later-issued claims here was proper regardless of whether (A) the PTA is applied before the double patenting analysis (because the challenged patent's post-PTA expiration date is after that of the reference patent) or (B) the PTA is applied after the double patenting analysis (because despite the pre-PTA expiration dates being the same, the challenged patent is a later-issuing obvious variant still at risk for harassment by multiple assignees).

Substantial New Question

Appellant argues there is no substantial new question of patentability because the examiner in the original prosecution was aware of both applications and “conducted an interference search” for both, so the examiner “would have” made a double patenting rejection “if [the examiner] believed that such a rejection was warranted.” Appeal Br. 15–17, 10.

We are not persuaded by Appellant's arguments. A substantial new question of patentability does exist here because there is insufficient evidence that double patenting actually was considered during the original prosecution. Ans. 9–11, 7. Regardless of what ideally should have happened during the original prosecution, the reexamination process exists because items sometimes get overlooked or errors are made. *See, e.g., Patlex Corp. v. Mossinghoff*, 758 F.2d 594, 604 (Fed. Cir. 1985) (“The reexamination statute's

purpose is to correct errors made by the government . . . and if need be to remove patents that should never have been granted.”), *on reh’g*, 771 F.2d 480, 481 (Fed. Cir. 1985) (denying the petition in relevant part).

Equity

Appellant argues that “an equitable doctrine cannot be applied in a manner that would be inequitable” given that filing a terminal disclaimer “is not possible now” as the patents are expired and “the record is completely devoid” of any “gamesmanship” or “unjustified or improper timewise extension.” Appeal Br. 14–15 (quotation omitted).

However, the Federal Circuit is unambiguous that the inequity here is Appellant’s enjoyment of a second patent’s term beyond the expiration of the first patent:

When the claims of a patent are obvious in light of the claims of an earlier commonly owned patent, the patentee can have no right to exclude others from practicing the invention encompassed by the later patent after the date of the expiration of the earlier patent. But when a patentee does not terminally disclaim the later patent before the expiration of the earlier related patent, the later patent purports to remain in force even after the date on which the patentee no longer has any right to exclude others from practicing the claimed subject matter. By permitting the later patent to remain in force beyond the date of the earlier patent’s expiration, the patentee wrongly purports to inform the public that it is precluded from making, using, selling, offering for sale, or importing the claimed

invention during a period after the expiration of the earlier patent.

By failing to terminally disclaim a later patent prior to the expiration of an earlier related patent, a patentee enjoys an unjustified advantage—a purported time extension of the right to exclude from the date of the expiration of the earlier patent. The patentee cannot undo this unjustified timewise extension by retroactively disclaiming the term of the later patent because it has *already* enjoyed rights that it seeks to disclaim.

Boehringer, 592 F.3d at 1347–48 (citations omitted); *see also Lonardo*, 119 F.3d at 965. Appellant also never addresses preserving the public’s right to make what is covered by the *earlier* patent after it expired:

The bar against double patenting was created to preserve that bargained-for right held by the public. *See, e.g., Miller v. Eagle Mfg. Co.*, 151 U.S. 186, 197–98, 202 (1894); . . . *Odiorne v. Amesbury Nail Factory*, 18 F.Cas. 578, 579 (C.C.D.Mass.1819). If an inventor could obtain several sequential patents on the same invention, he could retain for himself the exclusive right to exclude or control the public’s right to use the patented invention far beyond the term awarded to him under the patent laws. As Justice Story explained in 1819, “[i]t cannot be” that a patentee can obtain two patents in sequence “substantially for the same invention[] and improvements”; “it would completely destroy the whole consideration derived by the public for the grant of the patent, viz. the right to use the invention at the expiration of the term.” *Odiorne*, 18 F.Cas. at 579.

Thus, the doctrine of double patenting was primarily designed to prevent such harm by limiting a patentee to one patent term per invention or improvement.

Gilead, 753 F.3d at 1212 (parallel citations omitted).

Even beyond the mere existence of the extra term, Appellant concedes that it actively filed at least one lawsuit on the challenged patent after the expiration of both patents, yet Appellant fails to address whether that lawsuit seeks damages for the extra term of the challenged patent. *See* Appeal Br. 2.

We also agree with the Examiner that invalidating the challenged claims of a *second* patent (or third, fourth, and fifth patents in the case of the numerous related reexaminations here) does not take away Appellant's right to enforce its *first* patent. Ans. 17–18.

Thus, Appellant fails to persuade us that the result here is inequitable.

Conclusion

Appellant argues both double patenting rejections collectively with no separate arguments based on Nguyen. Accordingly, we sustain the double patenting rejections of claims 1, 5, 11, 33, 34, 58, and 64.

OUTCOME

The following table summarizes the outcome of each rejection:

Claim(s) Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 5, 11, 33, 34, 58, 64		Double patenting: '369 patent	1, 5, 11, 33, 34, 58, 64	
1, 5, 11, 33, 34, 58, 64		Double patenting: '369 patent and Nguyen	1, 5, 11, 33, 34, 58, 64	
Overall Outcome			1, 5, 11, 33, 34, 58, 64	

TIME TO RESPOND

Requests for extensions of time in this *ex parte* reexamination proceeding are governed by 37 C.F.R. § 1.550(c). See 37 C.F.R. § 41.50(f).

AFFIRMED

APPENDIX E

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

Appeal 2021-005258
Reexamination Control 90/014,457
Patent 7,002,621 B2
Technology Center 3900

EX PARTE COLLECT LLC, PATENT OWNER AND
APPELLANT

Entered: Dec. 1, 2021

DECISION ON APPEAL

Before JAMESON LEE, ALLEN R. MacDONALD, and
MICHAEL J. ENGLE, *Administrative Patent Judges*.

ENGLE, *Administrative Patent Judge*.

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. §§ 134(b) and 306,
Appellant¹ appeals from the rejection of claims 25–29
and 33 of U.S. Patent No. 7,002,621 B2 (“the ‘621
patent” or “challenged patent”) in this *ex parte*

¹ Appellant states that the real party in interest is “Collect LLC,
a wholly owned subsidiary of Micro Imaging Solutions LLC.”
Appeal Br. 2.

reexamination. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

TECHNOLOGY

The application relates to “solid state image sensors which are configured to be of a minimum size and used within communication devices specifically including video telephones.” ’621 patent, 1:21–25.

RELATED MATTERS

The challenged patent and its patent family have been involved in a number of proceedings before federal district courts and the USPTO. Appeal Br. 2 (listing 1 district court case, 20 *inter partes* review petitions, and 5 *ex parte* reexamination requests). Four of the reexaminations involve substantially similar issues on double patenting. *See* Appeal Nos. 2021-005046; 2021-005258; 2021-005302; 2021-005303.

For the challenged patent, two petitions for *inter partes* review were denied institution because the same claims at issue here “all have indiscernible or uncertain scope.” IPR2020-00571, Paper 14, at 20 (Oct. 2, 2020); IPR2020-00572, Paper 15, at 20–21 (Oct. 1, 2020). As it was not raised in the present proceeding, we do not address indefiniteness here.

REJECTION

Claims 25–29 and 33 of the ’621 patent are rejected for non-statutory double patenting over claims 52, 55, and 61 of U.S. Patent No. 6,452,626 (“the ’626 patent” or “reference patent”). Final Act. 4–17.

ISSUE

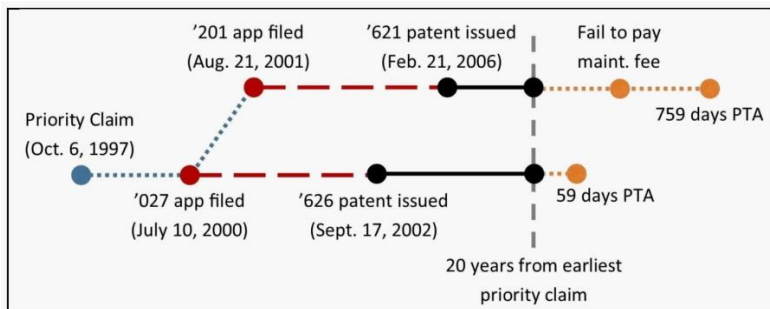
Did the Examiner err in applying an obviousness-type double patenting rejection to two related patents that (1) claim the same priority date, (2) have different patent term adjustments, and (3) are expired?

ANALYSIS

Overview

The challenged patent (the '621 patent) is the child of the reference patent (the '626 patent). The challenged patent issued after the reference patent, but both claim priority to the same application (filed Oct. 6, 1997) so they normally would expire at the same time (Oct. 6, 2017). 35 U.S.C. § 154(a)(2). However, due to various delays by the USPTO during prosecution, both were granted a patent term adjustment (“PTA”) under 35 U.S.C. § 154(b), with the challenged patent receiving significantly more PTA than the reference patent (759 days vs. 59 days). Therefore, the reference patent expired *before* the challenged patent. The challenged patent actually expired a few months later—midway through its PTA period—due to Appellant’s failure to pay an 11.5-year maintenance fee. Ans. 11. Both patents are now expired, but the statute of limitations for past damages has not yet passed. 35 U.S.C. § 286.

The timeline below shows the relevant dates for the two patents, including priority, filing, issuance, expiration, and PTA, with the challenged patent on top and its parent (the reference patent) below:



*Timeline for expiration of '621 patent (top)
& '626 patent (bottom)*

In this reexamination, the examiners invoked the doctrine of obviousness-type double patenting to reject the claims of the challenged patent as obvious variants of claims in the reference patent. Final Act. 4–17. Appellant does not dispute that the claims of the reference patent would have rendered obvious the claims of the challenged patent. Instead, Appellant argues the reference patent cannot be used for double patenting because (1) a judicially-created doctrine cannot take away statutorily guaranteed time, especially in light of the Federal Circuit’s treatment of patent term extensions (“PTE”) under 35 U.S.C. § 156, (2) the result would be inequitable given the facts here, and (3) no substantial new question of patentability has been raised because the examiner should have considered double patenting in the original prosecution. *See* Appeal Br. 4–19.

We are not persuaded by Appellant’s arguments. First, unlike a PTE under § 156, the statute for a PTA (§ 154) states that any terminal disclaimer should be applied *after* any PTA. Because the primary purpose of a terminal disclaimer is to overcome double patenting, the same rule should apply to double patenting. Moreover, even if double patenting was

based on the expiration date *before* applying any PTA (akin to a PTE), double patenting still would be appropriate here because two patents that are obvious variants and expire on the same day still need a terminal disclaimer to enforce common ownership. Second, the result here is not inequitable because the Federal Circuit has said the existence of any extra term of a second patent is itself what is inequitable, and Appellant still enjoyed the entire term of the earliest patent. Third, double patenting is a substantial new question because, regardless of what should have happened in the original prosecution, there is insufficient evidence that the original examiner actually considered double patenting.

Standard of Review

The PTO is “authorized during reexamination to consider the question of double patenting.” *In re Lonardo*, 119 F.3d 960, 966 (Fed. Cir. 1997); *see also* MPEP § 2258(I)(D). “As with statutory obviousness under 35 U.S.C. § 103, obviousness-type double patenting is an issue of law premised on underlying factual inquiries.” *Eli Lilly & Co. v. Teva Parenteral Meds., Inc.*, 689 F.3d 1368, 1376 (Fed. Cir. 2012).

Legal Background on Obviousness-Type Double Patenting, Terminal Disclaimers, PTA, & PTE

Obviousness-type double patenting is a “judicially created” doctrine that “prohibits an inventor from obtaining a second patent for claims that are not patentably distinct from the claims of the first patent.” *Lonardo*, 119 F.3d at 965. “There are two justifications for obviousness-type double patenting”: (1) “to prevent unjustified timewise extension of the right to exclude granted by a patent no matter how the extension is brought about” and (2) “to prevent

multiple infringement suits by different assignees asserting essentially the same patented invention.” *In re Hubbell*, 709 F.3d 1140, 1145 (Fed. Cir. 2013) (quotation omitted). For example, if an inventor receives a second patent with claims that are merely obvious variants of a first patent, double patenting helps prevent the patentee from (1) suing on the second patent after the first has already expired (i.e., improper time-wise extension) or (2) selling the two patents to different entities only to have both entities separately sue an alleged infringer on two obvious variants of each other (i.e., improper harassment by multiple assignees).

A patentee or applicant often can overcome double patenting by filing a terminal disclaimer. *Boehringer Ingelheim Int’l GmbH v. Barr Labs., Inc.*, 592 F.3d 1340, 1346 (Fed. Cir. 2010). Terminal disclaimers are expressly permitted by statute to “disclaim or dedicate to the public . . . any terminal part of the term” of a patent. 35 U.S.C. § 253(b). The USPTO has provided regulations on what a terminal disclaimer must contain to be effective. *E.g.*, 37 C.F.R. § 1.321. A terminal disclaimer solves the two concerns of double patenting by (1) making the *later* patent expire with the *earlier* patent and (2) rendering the second patent unenforceable if it is not commonly owned with the first patent. *E.g.*, 37 C.F.R. § 1.321(b)(2), (c)(3), (d)(3); MPEP §§ 804.02(VI), 1490(VI)(A), (IX). However, “a terminal disclaimer filed after the expiration of the earlier patent over which claims have been found obvious cannot cure obviousness-type double patenting.” *Boehringer*, 592 F.3d at 1347–48. Thus, a terminal disclaimer cannot cure any double patenting rejection against the expired patents here. Appeal Br. 17–18.

For two issued patents, double patenting and the need for a terminal disclaimer generally only apply to the *later* patent.² See *Eli Lilly & Co. v. Barr Labs., Inc.*, 251 F.3d 955, 968 & n.5 (Fed. Cir. 2001) (“A *later* claim that is not patentably distinct from an earlier claim in a commonly owned patent is invalid for obvious-type double patenting.”; “A patent owner cannot avoid double patenting by disclaiming the *earlier* patent.” (emphases added)). The question then is how to determine which patent is “later.” The answer depends on whether the patents issued from applications filed on or after June 8, 1995. This date is six months after enactment of the Uruguay Round Agreements Act (“URAA”), which changed the term of a patent from (A) 17 years after issue to (B) 20 years from the earliest filing date of any non-provisional U.S. application to which that patent claims priority. 35 U.S.C. § 154.

For two post-URAA patents, the “later” patent generally is determined by looking at the *expiration* date. *Novartis Pharms. Corp. v. Breckenridge Pharm. Inc.*, 909 F.3d 1355, 1362–63, 1366 (Fed. Cir. 2018). For two pre-URAA patents or certain scenarios involving one patent on each side of the URAA date, the “later” patent is instead determined by looking at the *issue* date. *Id.* at 1362 (“Traditionally, courts looked at the issuance dates of the respective patents, because, under the law pre-URAA, the expiration date of the patent was inextricably intertwined with the issuance date, and used the earlier-issued patent to

² For two co-pending applications, a provisional double patenting rejection against both applications may be appropriate if it is not yet known which will result in the later patent. See MPEP § 804(I)(1).

limit the patent term(s) of the later issued patent(s).”). Prior to the URAA, a patent expired 17 years after issuance, so “looking to patent issue dates had previously served as a reliable stand-in for the date that really mattered—patent expiration.” *Gilead Scis., Inc. v. Natco Pharma Ltd.*, 753 F.3d 1208, 1215 (Fed. Cir. 2014). Finally, if two post-URAA patents expire on the same day or two pre-URAA patents have the same issue date, then the patent with the higher patent number may be invalid for double patenting.³ See *Underwood v. Gerber*, 149 U.S. 224 (1893) (affirming Patent No. 348,073 was void over the same inventors’ Patent No. 348,072 when both patents had the same filing date, issue date, and expiration date).

A complication arises, however, in that Congress also provided two ways to potentially prolong the term of a patent. A patent term adjustment (“PTA”) under § 154(b) may adjust the term based on certain delays by the USPTO during prosecution, and a patent term extension (“PTE”) under § 156 may extend the term based on certain regulatory delays, such as the FDA reviewing a new drug. 35 U.S.C. §§ 154(b), 156. The question before us now is how a PTA under § 154 should factor into the double patenting analysis, such as whether double patenting should be based on the expiration date *before* a PTA or *after*. The Federal Circuit already addressed similar questions for a PTE,

³ As the patents here issued on different dates, we need not resolve whether an analysis for patents issued on the same day should first look to priority date or filing date rather than patent number (e.g., two pre-URAA patents with the same issue date but the patent with the higher patent number has a significantly earlier filing date and priority date).

yet it did so by contrasting the statutes for PTE (§ 156) versus PTA (§ 154). We discuss these cases below.

PTE & Terminal Disclaimers
(*Merck v. Hi-Tech*)

For a PTE under § 156, the starting point is *Merck & Co. v. Hi-Tech Pharmacal Co.*, 482 F.3d 1317 (Fed. Cir. 2007). In that case, the patent owner had already filed a terminal disclaimer to overcome an obviousness-type double patenting rejection. 482 F.3d at 1318–19. Later, the patent was awarded a PTE under § 156. *Id.* at 1319. The question before the court was whether a PTE under § 156 could be applied to a patent subject to a terminal disclaimer. *Id.* at 1324. The court held “a patent term extension under § 156 is not foreclosed by a terminal disclaimer.” *Id.* at 1322. In particular, “[t]he computation of a Hatch–Waxman patent term extension is from the expiration date resulting from the terminal disclaimer and not from the date the patent would have expired in the absence of the terminal disclaimer.” *Id.* at 1322–23. Put another way, a PTE under § 156 is applied *after* any terminal disclaimer.

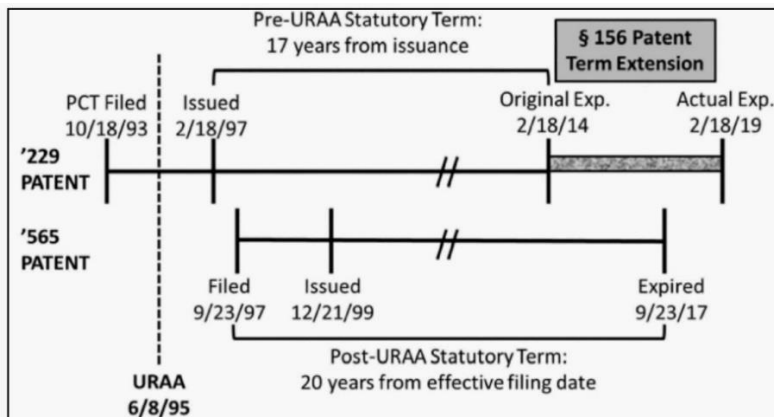
The Federal Circuit reached this conclusion by contrasting PTE with PTA. For a PTA, “§ 154(b)(2)(B) expressly excludes patents in which a terminal disclaimer was filed from the benefit of a term adjustment for PTO delays.” *Merck v. Hi-Tech*, 482 F.3d at 1322. Specifically, the statute states that “[n]o patent the term of which has been disclaimed beyond a specified date may be adjusted under this section beyond the expiration date specified in the disclaimer.” 35 U.S.C. § 154(b)(2)(B). The Federal Circuit explained that “[t]here is no similar provision that excludes patents in which a terminal disclaimer

was filed from the benefits of Hatch-Waxman extensions” under § 156. *Merck v. Hi-Tech*, 482 F.3d at 1322. Thus, a terminal disclaimer is applied *before* a PTE *because* PTE is different than PTA.

PTE & Double Patenting
(*Novartis v. Ezra*)

The next question was how a PTE applied to double patenting in the absence of a terminal disclaimer. As noted above, a terminal disclaimer generally is filed to overcome obviousness-type double patenting. *In re Van Ornum*, 686 F.2d 937, 948 (CCPA 1982); 37 C.F.R. § 1.321(c), (d); MPEP § 1490(II). Given this relationship between double patenting and terminal disclaimers and given the holding in *Merck v. Hi-Tech* that a terminal disclaimer applies *before* a PTE, the Federal Circuit not surprisingly held “as a logical extension of our holding in *Merck & Co. v. Hi-Tech*” that double patenting also should be considered *before* a PTE. *Novartis AG v. Ezra Ventures LLC*, 909 F.3d 1367, 1373–74 (Fed. Cir. 2018). Thus, “if a patent, under its original expiration date without a PTE, should have been (but was not) terminally disclaimed because of obviousness-type double patenting, then this court’s obviousness-type double patenting case law would apply, and the patent could be invalidated.” *Id.* at 1374. “However, if a patent, under its pre-PTE expiration date, is valid under all other provisions of law, then it is entitled to the full term of its PTE.” *Id.*

A timeline for the patents in *Novartis v. Ezra* is reproduced below:



Novartis v. Ezra, 909 F.3d at 1370. As shown in the timeline above, the challenged patent (the '229 patent) had an *earlier* filing date, issue date, and pre-PTE expiration date than the reference patent (the '565 patent). Because the challenged patent was the *earlier* patent (at least pre-PTE), the challenged patent was not invalid for double patenting. *Id.* at 1373–75.

PTA & Double Patenting

The question now before us is how a PTA affects double patenting. Appellant relies on one broadly worded sentence in *Novartis v. Ezra* to argue that “a judge-made doctrine” (i.e., obviousness-type double patenting) cannot “cut off a statutorily-authorized time extension.” Appeal Br. 10 (quoting *Novartis v. Ezra*, 909 F.3d at 1375). Although the holding in *Novartis v. Ezra* was about a PTE under § 156, Appellant extends that argument to suggest that any PTA under § 154 also is a “statutory grant of additional term” that “cannot be deemed improper.” *Id.*

Appellant's argument is not persuasive because it ignores the plain text of § 154 and the actual holding in *Novartis v. Ezra*.

First, contrary to Appellant's assertions, the decision in *Novartis v. Ezra* reaffirms that a double patenting analysis *should* be done even if a patent has a PTE. The real question was whether double patenting should be considered *before* or *after* a PTE, with the court ultimately deciding double patenting should be considered *before* a PTE. *Novartis v. Ezra*, 909 F.3d at 1374 (“if a patent, under its original expiration date without a PTE, should have been (but was not) terminally disclaimed because of obviousness-type double patenting, then this court's obviousness-type double patenting case law would apply, and the patent could be invalidated”). So here, we must do a double patenting analysis and the question is whether double patenting should be considered with the expiration dates *before* or *after* a PTA.

Second, the outcome for a PTE under § 156 in *Merck v. Hi-Tech* was based on the difference between § 156 and § 154. In particular, “§ 154(b)(2)(B) expressly excludes patents in which a terminal disclaimer was filed from the benefit of a term adjustment for PTO delays,” but there is an “absence of any such prohibition regarding Hatch–Waxman extensions” under § 156. *Merck v. Hi-Tech*, 482 F.3d at 1322. That reasoning in *Merck v. Hi-Tech* was important enough that when summarizing the prior case, *Novartis v. Ezra* repeated the prior case's “contrast between § 156 for PTE with the language of § 154 for patent term adjustments.” *Novartis v. Ezra*, 909 F.3d at 1373–74. Thus, the rule in *Merck v. Hi-*

Tech and *Novartis v. Ezra* for when to apply a PTE does not apply to a PTA because those decisions were premised on the contrast between PTE and PTA.

Third, the statutory language in § 154 is clear that any terminal disclaimer should be applied *after* any PTA (i.e., a PTA cannot adjust a term beyond the expiration date in any disclaimer). 35 U.S.C. § 154(b)(2)(B) (“No patent the term of which has been disclaimed beyond a specified date may be adjusted under this section beyond the expiration date specified in the disclaimer.”). Although Appellant asserts that the statute says the term “shall” be extended (Reply Br. 8), Appellant omits that all of those sentences are prefaced with the phrase “Subject to the limitations under paragraph (2),” which includes the limitations due to terminal disclaimers. *Id.* § 154(b)(1)(A), (B), (C). Thus, as recognized by *Merck v. Hi-Tech* and *Novartis v. Ezra*, the statute itself is clear that unlike a PTE under § 156, a PTA under § 154 shall *not* extend the term of a patent past the date of any terminal disclaimer.

Fourth, given that terminal disclaimers arise almost exclusively to overcome obviousness-type double patenting, Congress expressly addressing terminal disclaimers in § 154 is tantamount to addressing obviousness-type double patenting. See *Van Ornum*, 686 F.2d at 948; 37 C.F.R. § 1.321(c), (d); MPEP § 1490(II). Indeed, *Novartis v. Ezra* itself recognized that a rule for terminal disclaimers (from *Merck v. Hi-Tech*) should also apply to obviousness-type double patenting as “a logical extension.” 909 F.3d at 1373. The *Novartis v. Ezra* court rejected the argument “that the *Merck* court’s rationale only spoke to the impact of a new PTE on preexisting terminal

disclaimers,” instead finding that the prior “holding on the validity of a PTE for a patent that was terminally disclaimed *in order to overcome an obviousness-type double patenting rejection* is directly relevant to the instant case.” *Id.* at 1374 (quotation omitted). Obviousness-type double patenting and terminal disclaimers are two sides of the same coin: the problem and the solution. Just as *Novartis v. Ezra* found a rule on terminal disclaimers was “directly relevant” to double patenting and therefore applied that rule to double patenting as “a logical extension,” so too we hold that the statutory rule for terminal disclaimers in § 154 is directly relevant to double patenting and we apply that same rule to double patenting as a logical extension.

Indeed, in at least one related reexamination, Appellant itself argues that double patenting should be applied to post-PTA dates. *Compare* Appeal 2021-005302, Appeal Br. 7 (“the ’369 Patent . . . and ’626 Patent . . . have the same expiration date except for statutorily-authorized PTA”), *with id.* at 10 n.1 (“the ’626 Patent cannot be used as an obviousness-type double patenting reference because the ’626 Patent expired after the ’369 Patent”).

Finally, the Federal Circuit also previously said that “another crucial purpose of the doctrine” of double patenting was “to prevent an inventor from securing a second, later expiring patent” for “[p]atents . . . filed at the same time” that “have different patent terms due to examination delays at the PTO” under “§ 154(b) (patent term adjustments).” *AbbVie Inc. v. Mathilda & Terence Kennedy Inst. of Rheumatology Tr.*, 764 F.3d 1366, 1373 (Fed. Cir. 2014); *see also In re Fallaux*, 564 F.3d 1313, 1319 (Fed. Cir. 2009) (“In

some cases there may still be the possibility of an unjust time-wise extension of a patent arising from patent term adjustment under § 154 or patent term extension under § 156.”). That is precisely the scenario we have here where two patents have the same effective filing date but expire at different times due solely to PTAs.

Appellant provides no plausible reason for ignoring the clear statutory text and the contrast between § 154 and § 156 that formed the basis of *Merck v. Hi-Tech* and *Novartis v. Ezra*. Nor has Appellant provided any reason for applying the *post*-PTA date for terminal disclaimers yet the *pre*-PTA date for double patenting.⁴ We therefore hold that both obviousness-type double patenting and terminal disclaimers should be considered *after* any PTA.⁵

*The District Court Decision in
Mitsubishi Is Not Persuasive*

Appellant also cites a district court decision in *Mitsubishi Tanabe Pharma Corp. v. Sandoz, Inc.*,

⁴ Applying different dates for double patenting versus terminal disclaimers also creates inconsistent results. For example, suppose the *pre*-PTA expiration date of Patent A is 1 day after Patent B. Therefore, Patent B could be used as a double patenting reference (*pre*-PTA) against Patent A, and a terminal disclaimer (*post*-PTA) would wipe out *all* PTA on Patent A. However, Patent A could *not* be used as a double patenting reference (*pre*-PTA) against Patent B, so Patent B could have an unlimited amount of PTA, even long after the expiration of Patent A.

⁵ 35 U.S.C. § 154(b)(3)(A) gives the Director some discretion “establishing procedures for the application for and determination of patent term adjustments.” Because we decide the case based on the reasoning above, we need not decide whether that discretion includes the PTA issues here.

No. 3:17-cv-05319, __ F. Supp. 3d __, 2021 WL 1845499, at *27–30 (D.N.J. Mar. 22, 2021). Appeal Br. 13–17. We do not find Appellant’s citation to *Mitsubishi* persuasive. *See also* Ans. 10.

First, an earlier district court decision in the Western District of Michigan came out the opposite way from *Mitsubishi*. *Magna Elecs., Inc. v. TRW Automotive Holdings Corp.*, No. 12-cv-654, 2015 WL 11430786 (W.D. Mich. Dec. 10, 2015). Although the *Magna Electronics* case appears to have settled prior to any appeal, we understand that the decision in *Mitsubishi* is currently on appeal to the Federal Circuit (No. 21-1876; filed Apr 23, 2021).

Second, the *Mitsubishi* district court never addressed that double patenting applies even to two patents that have the same filing date, the same issue date, and the same expiration date. *Underwood*, 149 U.S. 224. For example, a terminal disclaimer is still needed to ensure that two patents remain commonly owned. *See Sandy MacGregor Co. v. Vaco Grip Co.*, 2 F.2d 655, 657 (6th Cir. 1924) (“in *Underwood v. Gerber* it was thought that the splitting up of one indivisible right into two and subjecting the infringer to suits by two different owners of the right infringed justified applying the defense of double patenting as against two patents issued on the same day”); *Van Ornum*, 686 F.2d at 945 (similarly summarizing *Underwood*).

Third, the district court’s entire discussion of the difference between § 154 and § 156 is relegated to a single footnote in which the court does not appear to have understood that a terminal disclaimer is the standard way to cure double patenting, thereby overlooking why the Federal Circuit decided a rule for terminal disclaimers (*Merck v. Hi-Tech*) should also

apply to a double patenting analysis (*Novartis v. Ezra*) as a “logical extension.” See *Mitsubishi*, 2021 WL 1845499, at *29 n.45.

Fourth, even within the same paragraph, the district court confuses when the challenged patent would have expired relative to the reference patent. Compare *Mitsubishi*, 2021 WL 1845499, at *29 (“absent the PTA granted to the ’788 Patent, both the ’788 Patent and the ’219 Patent would have the same expiration date”), with *id.* (“but for the § 154(b) PTA, the ’788 Patent would have expired before the ’219 Patent”). So it is not clear whether the district court was even considering the right facts.

Finally, in *Mitsubishi*, the challenged patent issued *before* the reference patent (May 17, 2011 vs. July 17, 2012). 2021 WL 1845499, at *27–28. That is opposite the present case where the challenged patent issued *after* the reference patent. Thus, even if we treated a PTA like PTE and double patenting were considered *before* a PTA, the outcome here still would be the opposite of *Mitsubishi* because the challenged patent in *Mitsubishi* was the *earlier* patent whereas the challenged patent here is the *later* patent.

For these reasons, we give little weight to the *Mitsubishi* decision.

*Double Patenting Here Was Proper
Regardless When the PTA Is Applied*

As discussed above, we hold that double patenting should be considered *after* any PTA is applied. Here, after applying the PTA, the challenged patent expired after the reference patent (PTA of 759 days vs. 59 days). Appeal Br. 8–9. Even factoring in the actual expiration date from Appellant’s failure to

pay the maintenance fee, “the ’621 Patent expired . . . 80 days after the ’626 expired.” *Id.* at 9 (emphasis omitted). Thus, the later-expiring claims of the challenged patent were properly rejected for obviousness-type double patenting over the earlier-expiring claims of the reference patent.

However, even if we treated a PTA like PTE and did a double patenting analysis *before* factoring in any PTA, a double patenting rejection still would be proper here because prior to the PTA, the challenged patent and the reference patent would have expired on the same day (Oct. 6, 2017). *Underwood*, 149 U.S. 224 (affirming a second patent as void when both patents had the same filing date, issue date, and expiration date); *see also* MPEP § 804(I)(B)(1)(b)(ii) (“If both applications are actually filed on the same day, or are entitled to the same earliest effective filing date[,] . . . the provisional nonstatutory double patenting rejection made in each application should be maintained until the rejection is overcome,” such as by “filing a terminal disclaimer in the pending application.”). Here, the challenged patent is a later-issued patent claiming obvious variants of the earlier-issued reference patent. Even with the same expiration date, double patenting and a terminal disclaimer are still needed to ensure that the later-issued obvious variant retains common ownership with the earlier-issued patent. This is necessary to accomplish double patenting’s second goal “to prevent multiple infringement suits by different assignees asserting essentially the same patented invention.” *Hubbell*, 709 F.3d at 1145; *see also Sandy MacGregor*, 2 F.2d at 657 (“in *Underwood v. Gerber* it was thought that the splitting up of one indivisible right into two and subjecting the infringer to suits by two different

owners of the right infringed justified applying the defense of double patenting as against two patents issued on the same day”); *see also Van Ornum*, 686 F.2d at 945 (similarly summarizing *Underwood*). Appellant never addresses that double patenting applies to patents with the same expiration date.

Appellant does argue that “there has been no harassment by multiple assignees” because the patents have been commonly owned so far and the patents are now expired. Appeal Br. 10. But the statutory time limitation for past damages is “six years prior to the filing of the complaint.” 35 U.S.C. § 286. The patents here expired less than six years ago, so the risk still remains for multiple assignees to seek past damages. Indeed, Appellant has already filed one lawsuit after both patents expired. Appeal Br. 2.

Appellant further argues that the patents “will be maintained by the same owner.” Appeal Br. 10. The only basis for this assertion is a single paragraph from a declaration of one inventor:

Because of the exclusive (field-of-use) nature of certain license agreements, MIS/Collect may not freely assign these patents and they have been, and will continue to be, owned by MIS/Collect. As the Chief Technology Officer and Co-Founder of Micro Imaging Solutions LLC, I can confirm that MIS/Collect will not sell off or split apart any portion of the patents that comprise the '621 Patent family to a third-party.

Adair Decl. ¶ 24. But such a declaration is unpersuasive. For example, suppose Appellant went out of business and a bankruptcy court (not Appellant

itself) split the patents among various creditors. Even if Appellant's licensees might have a breach-of-contract claim against the new patent owners, a third party sued by the multiple new owners has no way to enforce the inventor's declaration absent double patenting.

There also is no need to wait until *actual* harassment by multiple assignees. *See* Appeal Br. 7 (“this judicially created doctrine requires . . . harassment by multiple assignees”). One goal of double patenting and terminal disclaimers is to preemptively prevent the risk of such harassment:

Even though both patents are issued to the same patentee or assignee, it (is) possible that ownership of the two will be divided by later transfers and assignments. The possibility of multiple suits against an infringer by assignees of related patents has long been recognized as one of the concerns behind the doctrine of double patenting.

Van Ornum, 686 F.2d at 944 (quoting Chisum on Patents § 9.04(2)(b) (1981)).

In sum, the double patenting rejection of the later-issued claims here was proper regardless of whether (A) the PTA is applied before the double patenting analysis (because the challenged patent's post-PTA expiration date is after that of the reference patent) or (B) the PTA is applied after the double patenting analysis (because despite the pre-PTA expiration dates being the same, the challenged patent is a later-issuing obvious variant still at risk for harassment by multiple assignees).

Substantial New Question

Appellant argues there is no substantial new question of patentability because the examiner in the original prosecution was aware of both applications and “conducted an interference search” for both, so the examiner “would have” made a double patenting rejection “if [the examiner] believed that such a rejection was warranted.” Appeal Br. 18–19, 9.

We are not persuaded by Appellant’s arguments. A substantial new question of patentability does exist here because there is insufficient evidence that double patenting actually was considered during the original prosecution. Ans. 12, 5. Regardless of what ideally should have happened during the original prosecution, the reexamination process exists because items sometimes get overlooked or errors are made. *See, e.g., Patlex Corp. v. Mossinghoff*, 758 F.2d 594, 604 (Fed. Cir. 1985) (“The reexamination statute’s purpose is to correct errors made by the government . . . and if need be to remove patents that should never have been granted.”), *on reh’g*, 771 F.2d 480, 481 (Fed. Cir. 1985) (denying the petition in relevant part).

Equity

Appellant argues that “an equitable doctrine should not be applied in a manner that would be inequitable” given that “filing a terminal disclaimer now is not possible as the patents are expired” and “the record is completely devoid” of any “gamesmanship” or “unjustified or improper timewise extension.” Appeal Br. 17–18 (quotation omitted). According to Appellant, “the ’621 and ’626 Patents have different claim scopes, and thus are different property rights, so Patent Owner is separately entitled to them.” Reply Br. 10.

However, the Federal Circuit is unambiguous that the inequity here is Appellant's enjoyment of a second patent's term beyond the expiration of the first patent:

When the claims of a patent are obvious in light of the claims of an earlier commonly owned patent, the patentee can have no right to exclude others from practicing the invention encompassed by the later patent after the date of the expiration of the earlier patent. But when a patentee does not terminally disclaim the later patent before the expiration of the earlier related patent, the later patent purports to remain in force even after the date on which the patentee no longer has any right to exclude others from practicing the claimed subject matter. By permitting the later patent to remain in force beyond the date of the earlier patent's expiration, the patentee wrongly purports to inform the public that it is precluded from making, using, selling, offering for sale, or importing the claimed invention during a period after the expiration of the earlier patent.

By failing to terminally disclaim a later patent prior to the expiration of an earlier related patent, a patentee enjoys an unjustified advantage—a purported time extension of the right to exclude from the date of the expiration of the earlier patent. The patentee cannot undo this unjustified timewise extension by retroactively disclaiming the term of the later patent because it has *already* enjoyed rights that it seeks to disclaim.

Boehringer, 592 F.3d at 1347–48 (citations omitted); *see also Lonardo*, 119 F.3d at 965. Appellant also never addresses preserving the public’s right to make what is covered by the *earlier* patent after it expired:

The bar against double patenting was created to preserve that bargained-for right held by the public. *See, e.g., Miller v. Eagle Mfg. Co.*, 151 U.S. 186, 197–98, 202 (1894); . . . *Odiorne v. Amesbury Nail Factory*, 18 F.Cas. 578, 579 (C.C.D.Mass.1819). If an inventor could obtain several sequential patents on the same invention, he could retain for himself the exclusive right to exclude or control the public’s right to use the patented invention far beyond the term awarded to him under the patent laws. As Justice Story explained in 1819, “[i]t cannot be” that a patentee can obtain two patents in sequence “substantially for the same invention[] and improvements”; “it would completely destroy the whole consideration derived by the public for the grant of the patent, viz. the right to use the invention at the expiration of the term.” *Odiorne*, 18 F.Cas. at 579. Thus, the doctrine of double patenting was primarily designed to prevent such harm by limiting a patentee to one patent term per invention or improvement.

Gilead, 753 F.3d at 1212 (parallel citations omitted).

Even beyond the mere existence of the extra term, Appellant concedes that it actively filed at least one lawsuit on the challenged patent after the expiration of both patents, yet Appellant fails to address whether that lawsuit seeks damages for the extra term of the challenged patent. *See Appeal Br. 2.*

We also agree with the Examiner that invalidating the challenged claims of a *second* patent (or third, fourth, and fifth patents in the case of the numerous related reexaminations here) does not take away Appellant's right to enforce its *first* patent. Ans. 11.

Thus, Appellant fails to persuade us that the result here is inequitable.

Conclusion

Accordingly, we sustain the double patenting rejection of claims 25–29 and 33.

OUTCOME

The following table summarizes the outcome of the rejection:

Claim(s) Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
25–29, 33		Obviousness-Type Double Patenting: '626 patent	25–29, 33	

TIME TO RESPOND

Requests for extensions of time in this *ex parte* reexamination proceeding are governed by 37 C.F.R. § 1.550(c). See 37 C.F.R. § 41.50(f).

AFFIRMED

APPENDIX F

Reexamination Control No. 90/014,453
Patent Under Reexamination: 6,982,742
Art Unit: 3992

Dated: Nov. 18, 2020

EX PARTE REEXAMINATION COMMUNICATION

Notice of Pre-AIA Or AIA Status

1. The present application is being examined under the pre-AIA first to invent provisions.

Detailed Action

2. This Office Action address claims 22, 42, 58, and 66 of United States Patent Number 6,982,742. It has been determined in the Order Granting Ex Parte Reexamination (hereafter the "Order") mailed on 3/27/20 that a substantial new question of patentability was raised in the Request for Ex Parte Reexamination filed on 2/16/20 (hereafter the "Request").

3. In the response filed on 09/28/20, claims stay the same. Declarations by Spar, Lebby and Adair are entered and considered.

4. It is noted that a notice was filed on 11/06/20, and a statement of certified service to the third party requester is also provided. Among other things, the

notice alleges that the Patent Trial and Appeal Board (PTAB) violated the Administrative Procedures Act (APA). Accordingly, the notice exceeds the bare notice permitted by MPEP 2282, and such notice is not being considered, and is being expunged from the record.

Priority Claims

5. After reviewing US Patent 5,929,901 (hereafter “the 901 Patent”), US Patent 6,982,839 (hereafter “the 839 Patent”), and US Patent 6,275,255 (Hereafter “the 255 Patent”), the examiner determined that all three patents fail to provide sufficient support for claims 22, 42, 58, and 66 of the patent 742. Specifically, all three patents ‘901, ‘839, and ‘255 fail to disclose A transceiver radio element. . . for transmitting said converted pre-video signal as claimed in claims 22, 42, 58, and 66.

6. Therefore claims 22, 42, 58, and 66 of ‘742 do not obtain the priority date of the Patents ‘901, ‘839, and ‘255.

Prior/Concurrent Proceedings

7. A Litigation review of 6,982,742 Patent (hereafter ‘742) has revealed that the patent is subject to the court litigation of Collect LLC v. Samsung Electronics Co. Ltd. et al. 1:19cv438 is still open; and inter party reexaminations IPR2020-00559, IPR2020-00560, and IPR 2020-00561, which were petitioned on the same date as the current proceeding.

Reference Cited

i. U.S. Patent No. 6,424,369 to Adair et al. (“the 369 patent”), filed on Aug. 15, 2000, and is a double patenting reference for the ‘742 patent because it names common inventors and a common assignee;

ii. U.S. Patent No. 6,009,336 to Darryl R. Harris, Daniel L. Williams, and Thomas J. Walczak (hereafter “Harris”), filed on July 10, 1996 and issued on January 25, 2000 and is prior art at least under 35 U.S.C. § 102(e);

iii. Bluetooth Technology Overview

(<https://web.archive.org/web/19991008042723/http://www.bluetooth.com/v2/document/default.asp>), labeled as Butler Affidavit (Bluetooth) in the Table of Exhibits, was accessible on or before October 8, 1999 via www.bluetooth.com, and is admitted prior art (‘742, 5:46-48) and is also prior art under 35 U.S.C. § 102(b). The Challenged claims are not entitled to a filing date earlier than August 23, 2001 because 09/175,685 and its parents applicant does not reasonably convey to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date MPEP § 211.05 § 120.

iv. Bluetooth and Video

(<https://web.archive.org/web/20010418195743/http://www.bluetooth.com/text/bluetoothguide/intro/intro.asp?action=sas>), labeled as Butler Affidavit (Bluetooth 2) in the Table of Exhibits, was publicly accessible on or before April 18, 2001 via [bluetooth.com](http://www.bluetooth.com), and is prior art at least under 35 U.S.C. § 102(a);

v. U.S. Patent No. 6,590,928 was filed on September 17, 1997 and issues on July 8, 2003 to Jacobus Cornelis Haartsen (“Haartsen”), and is prior art at least under 35 U.S.C. § 102 (e)

Availability of references for double patenting rejection

Reference ii, i.e., Harris, predate the earliest priority date of the '742 patent and is therefore qualified as prior art under 35 USC 102(e).

The APA reference was not applied in any rejection during original prosecution, reexamination, or review of the '626 patent. Although Harris was applied in the prosecution of '369 patent it was not applied in the view of APA reference in a double patenting rejection. Accordingly, they can be used to raise a Substantial New Question of Patentability.

Litigation Reminder

8. The patent Owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving Patent Number: 6,982,742 throughout the course of this reexamination proceeding.

Response To Argument

9. Applicant's arguments filed 11/09/20 have been fully considered but they are not persuasive.

Double Patenting:

Applicant argued that the double patenting rejection is improper because the rejection is solely due to patent term adjustment authorized under 35 U.S.C § 154, and based on the Court's Ruling on 35 U.S.C § 156 in *Novartis*, '369 cannot be considered as an obviousness-type double patenting reference.

Examiner disagrees.

"[T]he proper reference point for an obviousness-type double patenting inquiry is the expiration date of the patent in question." *Novartis Pharms. v. Breckenridge Pharm.*, 909 F.3d 1355, 1362-63, 128

USPQ2d 1745, 1747 (Fed. Cir. 2018) (citing *Gilead Sciences, Inc. v. Natco Pharma Ltd.*, 753 F.3d 1208, 1215, 110 USPQ2d 1551, 1558 (Fed. Cir. 2014)). “an earlier-expiring patent can qualify as an obviousness-type double patenting reference for a later-expiring patent.” *Gilead Sciences, Inc. v. Natco Pharma Ltd.*, 753 F.3d 1208, 1217, 110 USPQ2d 1551, 1558 (Fed. Cir. 2014). See also *Novartis Pharms. v. Breckenridge Pharm.*, 909 F.3d 1355, 1360, 128 USPQ2d 1745, 1747 (Fed. Cir. 2018) MPEP 804.I.2.D

Therefore, since under 35 U.S.C. 154, ‘369 patent has an earlier-expiring patent date than that of ‘742 patent, ‘369 patent qualifies as an obviousness-type double patenting reference for ‘742.

Federal court’s ruling on 35 U.S.C. 156 does NOT apply to 35 U.S.C. 154. Although Federal Court in *Novartis* found that Patent Term Extension under 35 U.S.C § 156 did not qualify a reference as an obviousness-type double patenting reference that otherwise would not, the court did not make the same finding for Patent Term Adjustment under 35 U.S.C § 154. In fact, the court pointed out the key distinction between the two statutes. The language of § 154 expressly excluded patents with a terminal disclaimer and § 156 did not. It was with that distinction, the court concluded a patent term extension under § 156 is not foreclosed by a terminal disclaimer:

We first recognized that a straightforward reading of § 156 mandates a term extension so long as the other enumerated statutory requirements for a PTE are met. *Id.* at 1321–22 (citing 35 U.S.C. § 156(a)). We then noted the contrast between § 156 for PTE with the language of § 154 for patent term adjustments:

§ 154 “expressly excludes patents in which a terminal disclaimer was filed from the benefit of a term adjustment for PTO delays,” but § 156 contains “no similar provision that excludes patents in which a terminal disclaimer was filed from the benefits of Hatch-Waxman extensions.” *Id.* at 1322. Thus, this court concluded that “[t]he express prohibition against a term adjustment regarding PTO delays [under § 154(b)], the absence of any such prohibition regarding Hatch-Waxman extensions, and the mandate in § 156 that the patent term shall be extended if the requirements enumerated in that section are met, support the conclusion that a patent term extension under § 156 is not foreclosed by a terminal disclaimer.” - *Novartis*, 909 F.3d 1374.

Therefore, since 35 U.S.C § 154 “expressly excludes patents in which a terminal disclaimer was filed from the benefit of a term adjustment for PTO delays,” it can be interpreted that a patent term adjustment under 35 U.S.C § 154 IS foreclosed by a terminal disclaimer and the same ruling does not apply to 35 U.S.C § 154.

Applicant additionally made following arguments:

A. The difference in expiration dates between the ‘742 and ‘369 Patent is solely Due to Patent Term Adjustment under 35 U.S.C § 154; and since no double patenting rejection was made in the prosecution of ‘742, the currently double patenting rejection is not proper. Applicant also made the similar argument under response section B.3 of the response filed.

Examiner disagrees.

Examiner believes the double patenting rejection with a reference that is only valid under 35 U.S.C § 154 is proper for the reason explained above.

Furthermore under 35 U.S.C. 303(a), a obviously double patenting rejection may raise with an art previously considered by the Office if it is presented in a new light or a different way that escaped review during earlier examination. Since there is no evidence suggests that the former examiner had expressly considered the obvious double patenting issues between the specific claims of '742 and '369, the rejection is proper.

Applicant argued:

B. The '742 cannot be the subject of obviousness double patenting over the '369 patent Solely based on 35 U.S.C. 154 Patent Term Adjustment dates of the Patent. Applicant cited Novartis as the primary reason for the argument. Furthermore, applicant argued that none of the cited case laws related to a change in patent expiration dates solely due to statutorily authorized under 35 U.S.C. 154. Applicant also cited Novartis' founding that "a judge-made doctrine" does not 'cut off a statutorily authorized time extension." Finally, applicant argued that cases cited in the double patenting rejection heading below do not apply because they are pre-GATT and none of them "related to a change in patent expiration date solely due to PTA under 35 U.S.C. 154."

Examiner disagrees.

Federal court's ruling on 35 U.S.C. 156 does not apply to 35 U.S.C. 154. In fact the court pointed out the key distinction between the two statues; and that

was the language of § 154 expressly excluded patents which a terminal disclaimer was filed and § 156 did not. It was with that founding, the court concluded that a patent term extension under § 156 is not foreclosed by a terminal disclaimer:

We first recognized that a straightforward reading of § 156 mandates a term extension so long as the other enumerated statutory requirements for a PTE are met. *Id.* at 1321–22 (citing 35 U.S.C. § 156(a)). We then noted the contrast between § 156 for PTE with the language of § 154 for patent term adjustments: § 154 “expressly excludes patents in which a terminal disclaimer was filed from the benefit of a term adjustment for PTO delays,” but § 156 contains “no similar provision that excludes patents in which a terminal disclaimer was filed from the benefits of Hatch-Waxman extensions.” *Id.* at 1322. Thus, this court concluded that “[t]he express prohibition against a term adjustment regarding PTO delays [under § 154(b)], the absence of any such prohibition regarding Hatch-Waxman extensions, and the mandate in § 156 that the patent term shall be extended if the requirements enumerated in that section are met, support the conclusion that a patent term extension under § 156 is not foreclosed by a terminal disclaimer.” - *Novartis*, 909 F.3d 1374.

Therefore, since 35 U.S.C § 154 “expressly excludes patents in which a terminal disclaimer was filed from the benefit of a term adjustment for PTO delays,” it can be interpreted that a patent term adjustment under 35 U.S.C § 154 IS foreclosed by a

terminal disclaimer and the same ruling does not apply to 35 U.S.C § 154.

Furthermore, Court's conclusion that "a judge-made doctrine" would 'cut off a statutorily authorized time extension" does not apply to 35 U.S.C § 154 because it is 35 U.S.C § 154's intention to allow its authorized time extension to be cut off by "a judge-made doctrine."

It is noted that:

MPEP 2258.1 states:

Typically, substantial new questions of patentability and rejections in a reexamination proceeding are based on "prior art" patents and publications. However, there are exceptions, even for reexaminations ordered under **35 U.S.C. 304**. For example, In *In re Lonardo*, 119 F.3d 960, 43 USPQ2d 1262 (Fed. Cir. 1997), the Federal Circuit upheld a nonstatutory double patenting rejection in which the patent upon which the rejection was based and the patent under reexamination shared the same effective filing date.

MPEP 2258 I.D States:

Double patenting is normally proper for consideration in reexamination under **35 U.S.C. 302**. See *In re Lonardo*, 119 F.3d 960, 43 USPQ2d 1262 (Fed. Cir. 1997). In *Lonardo*, the Federal Circuit reviewed and interpreted the language of **35 U.S.C. 303** and stated that:

Since the statute in other places refers to prior art in relation to reexamination, *see id.*, it seems apparent, it is Congress' intention to phrase

‘patents and publications’ and ‘other patents or printed publications’ in section 303(a) not be limited to prior art patents or printed publications. . . . Finally, it is reasonable to conclude that Congress intended to include double patenting over a prior patent as a basis for reexamination because maintenance of a patent that creates double patenting is as much of an imposition on the public as maintenance of patent that is unpatentable over prior art. Thus, we conclude that the PTO was authorized during reexamination to consider the question of double patenting based upon the ‘762 patent.

In re Lonardo, 119 F.3d at 966, 43 USPQ2d at 1266. Accordingly, the issue of double patenting, over prior art patents or non-prior art patents, is appropriate for consideration in reexamination under 35 U.S.C. 302, both as a basis for ordering reexamination under 35 U.S.C. 304 and during subsequent examination on the merits. The issue of double patenting is to be considered by the examiner when making the decision on the request for reexamination. The examiner should determine whether the issue of double patenting raises a substantial new question of patentability. The issue of double patenting is also to be considered during the examination stage of reexamination proceeding. In the examination stage, the examiner should determine whether a rejection based on double patenting is appropriate.

Therefore, both pre-GATT and post-GATT patents are subject to double patenting and the cases

including *In re Londardo* are applicable and controlling.

C. Applicant argued that the single ownership of '742 and '369 prevented harassment from multiple assignees. Therefore, obviousness double patenting rejection is not proper because there is no need to prevent possible harassment by multiple assignees.

Examiner disagrees.

There are two issues that non-statutory double patenting rejections are intended to prevent. The common ownership of the patents only prevents possible harassment by multiple assignees and not "the unjustified or improper time wise extension of the 'right to exclude' granted by a patent."

The '742 Patent Properly Claims Priority to the '901 Patent

A. Applicant argued that '901 Patent specification more than reasonably conveys to a person skilled in the art possession of the claimed inventive reduced area imaging device as applied to wireless applications, including wireless telephones. Applicant argued that the '901 patent describes and builds on the CMOS imager work that DR. Eric Fossum performed for NASA as part of NASA's efforts to develop image product suited for spacecraft-products that would inherently be designed for and capable of wireless applications. The '901 Patent also includes and reference articles describing Dr. Fossum's work for NASA, which again expressly suggest to a person skilled in the art of wireless applications of the claimed imaging devices. Applicant's submitted declarations presented similar argument.

Examiner disagrees.

The determination of priority date of the '742 Patent is intended to clarify the record. The cited section of '901 Patent:

A further discussion of the timing and control circuitry found on board 40 and incorporated with the pixel array 90 is described in an article entitled "Active Pixel Image Sensor Integrated With Readout Circuits" appearing in NASA Tech particular article is also incorporated by reference herein. – Specification col. 10, lines 8-15.

There is no mention of a transceiver radio element . . . for transmitting said converted pre-video signal. It is also unclear if the pixel arrays is implemented in the NASA spacecraft. And even if it was implemented, it is unclear if the implemented structure is related to the one disclosed in '742. For example, a wireless radio communication system is not the same as a transceiver radio element. . . for transmitting said converted pre-video signal.

B. Applicant further argued that:

Moreover, the Federal Circuit's recent decision in *Immunex*, make clear that support for claims under 35 U.S.C. 112 includes the understanding of persons skilled in the art in light of the description in the specification, including guidance provided by additional materials suggested by the specification. 964 F.3d 1064. Applying *immunex* here, the '901 patent, and thus the '742 Patent, more than reasonably conveys to a person skilled in the art possession of the wireless features.

Examiner disagrees.

Unlike the instant case where there is no description of a transceiver radio element other than an imager and the “Nasa Tech Briefs,” in Immunex, the specification describes a truncated/mutated ’75 DNA sequence and a sequence identifier that would have led a person skilled in the art to the complete sequence. Therefore it is difficult to draw similarity between the two, and the ’742 Patent does not have priority claim to the ’901 Patent.

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on nonstatutory double patenting provided the reference

application or patent either is shown to be commonly owned with the examined application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. See MPEP § 717.02 for applications subject to examination under the first inventor to file provisions of the AIA as explained in MPEP § 2159. See MPEP §§ 706.02(1)(1) - 706.02(1)(3) for applications not subject to examination under the first inventor to file provisions of the AIA. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO Internet website contains terminal disclaimer forms which may be used. Please visit www.uspto.gov/patent/patents-forms. The filing date of the application in which the form is filed determines what form (e.g., PTO/SB/25, PTO/SB/26, PTO/AIA/25, or PTO/AIA/26) should be used. A web-based eTerminal Disclaimer may be filled out completely online using web-screens. An eTerminal Disclaimer that meets all requirements is auto-processed and approved immediately upon submission. For more information about eTerminal Disclaimers, refer to www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp.

11. Claims 22, 42, 58, and 66 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1, 17, 28, 30, 49, 58, and 61 of U.S. Patent No. 6,424,369. Although the claims at issue are not identical, they are not patentably distinct from each other because:

a. Claims 22, 42, 58, and 66 of the patent '742 and claim of patent '369 are listed side by side in the following table.

	'742 Patent Claim 22	'369 Patent Claim 17, claim 28, and claim 30
Pre[1]	In a PDA Having capability to transmit and receive data in a communication network,	In a PDA having capability to transmit data [between a computer connected] to a communication network
Pre[2]	The PDA having a housing, and a video view screen for viewing the data which includes video signals, the improvement comprising:	The PDA having a housing, and a video view screen for viewing the data which includes video signals, the improvement comprising:
22.a vs 17.a	A camera module for taking video images, said camera module communicating with circuitry within said PDA enabling viewing on said video view screen and enabling video signals to be transmitted from said camera module to said computer, said camera module including an image sensor housed therein, said image sensor lying in a first plane and including an array of pixels for receiving images thereon, said image	A camera module for taking video images, said camera module communicating with circuitry within said PDA enabling viewing on said video view screen and enabling video signals to be transmitted from said camera module to said computer, said camera module including an image sensor housed therein, said image sensor lying in a first plane and including an array of [CMOS] pixels for receiving images thereon, said

	<p>sensor further including circuitry means on said first plane and coupled to said array of said pixels for timing and control of said array of pixels, said image sensor producing a pre-video signal.</p>	<p>image sensor further including circuitry means on said first plane and coupled to said array of said [CMOS] pixels for timing and control of said array of [CMOS] pixels, said image sensor producing a pre-video signal [; and]</p>
12.b vs 17.b	<p>A first circuit board electrically connected to said image sensor, said first circuit board including circuitry means for converting said pre-video signal to a desired video format;</p>	<p>A first circuit board electrically connected to [said image sensor and separated from] said image sensor, said first circuit board including circuitry means for converting said pre-video signal to a desired video format[.]</p>
22.c	<p>A transceiver radio element housed within said camera module and electrically coupled to said first circuit board for transmitting said converted pre-video signal; and</p>	<p>Claim 28 of the 369 patent recited “a device , as claimed in claim 17, further including: a retractable cable interconnecting said camera module to said PDA . . .” and Claim 30 of the 369 patent further recites “a device, as claimed in claim 17, further including: a wireless telephone attached to</p>

		said PDA.” The intent of the connecting a camera module to said PDA of claim 28 and the wireless method of claim 30 expands the scope of the claim 17 of ‘369 to be similar to that of claim 22 of the ‘742 patent.
22.d	A transceiver radio module housed in the PDA and wirelessly communicating with said transceiver radio element for receiving said converted pre-video signal, and	Claim 30 of the 369 patent further recites “a device, as claimed in claim 17, further including: a wireless telephone attached to said PDA.”
22.e	Said transceiver radio element being electrically coupled to the video view screen of the PDA enabling viewing of the converted pre-video signals.	Claim 30 of the 369 patent further recites “a device, as claimed in claim 17, further including: a wireless telephone attached to said PDA.”
	‘742 Patent Claim 42	‘369 Patent Claim 49 claim 28, and claim 30
Pre[1]	In a PDA having capability to transmit and receive data in a communication network, the improvement comprising:	In a PDA having capability to transmit data between a personal computer connected to a communication network, the

		improvement comprising:
42.a vs 49.a	A video system integral with said PDA for receiving and transmitting video images, and for viewing said images. said video system comprising:	A video system integral with said PDA for receiving and transmitting video images, and the for viewing said images, said video system comprising:
42.b vs 49.b	<p>A camera module housing an image sensor therein,</p> <p>Said image sensor lying in a first plane and including an array of pixels for receiving images thereon,</p> <p>Said image sensor producing a pre-video signal a first circuit board lying in a second plane and electrically coupled to said image sensor,</p> <p>Said first circuit board including circuitry means for timing and control of said array of pixels and</p> <p>Circuitry means for processing and</p>	<p>A camera module housing an image sensor therein,</p> <p>Said image sensor lying in a first plane and including a an array of CMOS pixels for receiving images thereon,</p> <p>Said image sensor producing a pre-video signal, a first circuit board lying in a second plane and electrically coupled to said image sensor,</p> <p>Said first circuit board including circuitry means for timing and control of said array of CMOS pixels and</p> <p>Circuitry means for processing and</p>

	converting said pre-video signal to a desired video formats,	converting said pre-video signal to a desired video format; and
42.c	A transceiver radio element communicating with said first circuit board for transmitting said converted pre-video signal;	Claim 28 of the 369 patent recited “a device , as claimed in claim 17, further including: a retractable cable interconnecting said camera module to said PDA . . .” and Claim 30 of the 369 patent further recites “a device, as dailned in claim 17, further including: a wireless telephone attached to said PDA.” The intent of the connecting a camera module to said PDA of claim 28 and the wireless method of claim 30 expands the scope of the claim 49 of ‘369 to be similar to that of claim 42 of the ‘742 patent
42.d	A transceiver radio module mounted in said PDA for wirelessly receiving	Claim 30 of the 369 patent further recites “a device, as claimed in claim 17, further including: a wireless

	said converted pre-video signal; and	telephone attached to said PDA.”
42.e vs 49.c	<p>A video view screen attached to said PDA for viewing said video images,</p> <p>Said video view screen communicating with said transceiver radio module, and</p> <p>Displaying video images processed by said first circuit board.</p>	<p>49.c a video view screen attached to said PDA for viewing said video images,</p> <p>Said video view screen communicating with said first circuit board.</p>

	‘742 Patent Claim 58	‘369 Patent Claim 58 claim 28, and claim 30
Pre[l]	<p>In a PDA</p> <p>having capability to transmit and receive data in a communication network</p> <p>The PDA including a video view screen for viewing the video images,</p> <p>The improvement comprising:</p>	<p>In a PDA</p> <p>having capability to transmit data between a personal computer connected to a communication network,</p> <p>The PDA including a vide view screen for viewing the video images,</p> <p>The improvement comprising:</p>

58.a vs 58.a	<p>A camera module for taking video images,</p> <p>Said camera module communicating with circuitry within said PDA enabling viewing of said video images on said PDA and enabling video signals to be transmitted from said camera module to the personal computer</p> <p>Said camera module including an image sensor housed therein, said image sensor lying in a first plane and including an array of pixels for receiving images thereon,</p> <p>Said image sensor further including circuitry means electrically coupled to said array of said pixels for timing and control of said array of pixels,</p> <p>Said circuitry means for timing and control placed remote from</p>	<p>A camera module for taking video image,</p> <p>Said camera module communicating with circuitry within said PDA enabling viewing of said video image on said PDA and enabling video signals to be transmitted from said camera module to the personal computer</p> <p>Said camera module including an image sensor housed therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving image thereon</p> <p>Said image sensor further including circuitry means electrically coupled to said array of said CMOS pixels for timing and control of said array of CMOS pixel,</p> <p>Said circuitry means for timing and control placed remote from said array of CMOS</p>
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	<p>said array of pixels on a second plane,</p> <p>Said image sensor producing a pre-video signal,</p> <p>A first circuit board electrically connected to said image sensor and lying in a third plane,</p> <p>Said first circuit board including circuitry means for processing and converting said pre-video signal to a desired video format</p>	<p>pixels on a second plane,</p> <p>Said image sensor producing a pre-video signal,</p> <p>A first circuit board electrically connected to said image sensor and lying in a third plane;</p> <p>Said first circuit board including circuitry means for processing and converting said pre-video signal w a desired video format</p>
58.b	<p>And a radio transceiver element communicating with said first circuit board for wirelessly transmitting said converted pre-video signal.</p>	<p>Claim 28 of the 369 patent recited “a device , as claimed in claim 17, further including: a retractable cable interconnecting said camera module to said PDA. . .” and Claim 30 of the 369 patent further recites “a device, as claimed in claim 17, further including: a wireless telephone attached to said PDA.” The intent of the connecting a camera module to said PDA of claim 28 and</p>

		<p>the wireless method of claim 30 expands the scope of the claim 58 of '369 to be similar to that of claim 58 of the '742 patent.</p> <p>Claim 30 of the 369 patent further recites "a device, as claimed in claim 17, further including: a wireless telephone attached to said PDA."</p> <p>These intents can similarly be applied to claim 58 of '369.</p>
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	'742 Patent Claim 66	'369 Patent Claim 61 claim 28, and claim 30
Pre[l]	<p>A PDA</p> <p>Having capability to transmit and receive data in a communication network,</p> <p>Said PDA comprising:</p>	<p>A PDA</p> <p>Having capability for receiving and transmitting video and audio images between the PDA and a personal computer connected to a communication network,</p> <p>Said PDA comprising:</p>
66.a vs 61.a	An image sensor lying in a first plane	An image sensor lying in a first plane

	<p>including an array of pixels for receiving images thereon,</p> <p>Said image sensor producing a pre-video signal:</p>	<p>including an array of COMS pixel for receiving images thereon,</p> <p>Said image sensor producing a pre-video signal;</p>
66.b vs 61.b	<p>A first circuit board electrically communicating with said image sensor,</p> <p>Said first circuit board including circuitry means for timing and control of said array of pixels and circuitry means for processing and converting said pre-video signal to a desired video format;</p>	<p>A first circuit board electrically communicating with said image sensor,</p> <p>and separated from said image sensor,</p> <p>said first circuit board including circuitry means for timing and control of said array of CMOS pixels and circuitry means for processing and converting said pre-video signal to a desired video format;</p>
66.c	<p>A radio transceiver element communicating with said first circuit board for wirelessly transmitting said converted pre-video signals;</p>	<p>Claim 28 of the 369 patent recited “a device , as claimed in claim 17, further including: a retractable cable interconnecting said camera module to said PDA . . .” and Claim 30 of the 369 patent further recites “a</p>

		<p>device, as claimed in claim 17, further including: a wireless telephone attached to said PDA.” The intent of the connecting a camera module to said PDA of claim 28 and the wireless method of claim 30 expands the scope of the claim 61 of ‘369 to be similar to that of claim 66 of the ‘742 patent.</p> <p>Claim 30 of the 369 patent further recites “a device, as claimed in claim 17, further including: a wireless telephone attached to said PDA.” These intents can similarly be applied to claim 61 of ‘369.</p>
66.d vs 61.c	<p>A camera module housing said image sensor,</p> <p>Said first circuit board, and said transceiver radio element therein</p>	A camera module housing said image sensor;
66.e	A radio transceiver module housed within the PDA for wirelessly	Claim 28 of the 369 patent recited “a device , as claimed in

	communicating with said radio transceiver element and receiving said converted pre-video signal:	claim 17, further including: a retractable cable interconnecting said camera module to said PDA. . ." and Claim 30 of the 369 patent further recites "a device, as claimed in claim 17, further including: a wireless telephone attached to said PDA." The intent of the connecting a camera module to said PDA of claim 28 and the wireless method of claim 30 expands the scope of the claim 61 of '369 to be similar to that of claim 66 of the '742 patent.
66.f vs 61.d	A transceiver/amplifier section electrically coupled to said transceiver radio module for amplifying and further transmitting the converted pre- video signal, And for receiving, and amplifying video and audio signal	A transceiver/amplifier section electrically coupled to said first circuit board for transmitting, receiving and amplifying video and audio signals;

	transmitted by another party;	
66.g vs 61.e	<p>A digital signal processor electrically coupled to said transceiver radio module and said transceiver/amplifier section,</p> <p>Said digital signal processor further conditioning said pre-video signal which is first conditioned by said first circuit board,</p> <p>And also for conditioning video and audio signal received by transceiver/amplifier section from the other party:</p>	<p>A digital signal processor electrically coupled to said first circuit board and said transceiver / amplifier section,</p> <p>Said digital signal processor further conditioning said pre-video signal which is first conditioned by said first circuit board,</p> <p>And also for conditioning video and audio signals from said transceiver/ amplifier section;</p>
66.h vs 61.f	A microphone electrically communicating with said digital signal processor for receiving sound and converting the sound to audio signals;	A microphone electrically communicating with said digital signal processor for recording and receiving audio signals;
66.i vs 61g	A speaker electrically communicating with said digital signal	A speaker electrically communicating with said digital signal

	processor for broadcasting under signals;	processor for broadcasting audio signals;
66.j vs 61.h	A video view screen attached to said PDA, said video view screen for selectively displaying images from said imaging device, And for selectively displaying video images received by said transceiver/ amplifier section; and	A video view screen attached to said PDA, said video view screen for selectively displaying images from said imaging device, And for selectively displaying video images received by said transceiver/ amplifier section;
66.k vs 61.i	A video switch communicating with said first circuit board and said digital signal processor for switching video images to be viewed on said video view screen; and	A video switch communicating with said first circuit board and said digital signal processor for switching video images to be viewed on said video view screen; and
66.l vs 61.j	A power supply mounted to said PDA for providing power thereto.	A power supply mounted to said PDA for providing power thereto.

b. The term “comprising” cited in the claims of ‘742 allows for additional elements cited by ‘369.

c. Claim 28 of the 369 patent recited “a device, as claimed in claim 17, further including: a retractable

cable interconnecting said camera module to said PDA. . .” and Claim 30 of the 369 patent further recites “a device, as claimed in claim 17, further including: a wireless telephone attached to said PDA.” The intent of the connecting a camera module to said PDA of claim 28 and the wireless method of claim 30 expands the scope of the claim 17 of ‘369. Furthermore, in ‘369 specification, the wireless telephone can transmitting and receiving audio and video signals. Therefore, the wireless radio communication component of claims 22, 42, 58, and 66 of the patent ‘742 is included within the scope of claims 28 and 30 of ‘369.

d. Furthermore, it would have been obvious to an artisan at the time of the invention to include teaching of claims 28 and 30 of ‘369 with claims 17, 49, 58, and 61 of claims ‘369 in order to allow the users to communicate through a wireless network.

12. Claims 22, 42, 58, and 66 of ‘742 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1, 17, 28, 30, 49, 58, and 61 of U.S. Patent No. 6,424,369 in view of U.S. Patent No. 6,009,336, Harris.

a. Claims 22, 42, 48, and 66 of ‘742 are rejected under the similar rational as those present for claims 1, 17, 28, 30, 49, 58, and 61 of U.S. Patent No. 6,424,369; (see above) in additional, Harris teaches the wireless radio communication component.

b. Harris teaches “a multi-mode communication device” combining “a portable radio telephone with a personal digital assistant.” See Harris, col. 1, lines 4-6, 43-46; col. 2, lines 57-65; col.

3, lines 1-6; col. 9, lines 44-61; col. 3, lines 9-18; col. 5, lines; 38-55.

e. Furthermore, it would have been obvious to an artisan at the time of the invention to include teaching of Harris with claims 17, 49, 58, and 61 of claims '369 in order to allow the users to communicate through a wireless network; and it would be a simple substitution of combine Harris' wireless teaching with that network structure of '369.

Conclusion

THIS ACTION IS MADE FINAL.

A shortened statutory period for response to this action is set to expire 2 from the mailing date of this action.

Extensions of time under 37 CFR 1.136(a) do not apply in reexamination proceedings. The provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Further, in 35 U.S.C. 305 and in 37 CFR 1.550(a), it is required that reexamination proceedings "will be conducted with special dispatch within the Office."

Extensions of time in reexamination proceedings are provided for in 37 CFR 1.550(c). A request for extension of time must specify the requested period of extension and it must be accompanied by the petition fee set forth in 37 CFR 1.17(g). Any request for an extension in a third party requested ex parte reexamination must be filed on or before the day on which action by the patent owner is due, and the mere filing of a request will not effect any extension of time. A request for an extension of time in a third party requested ex parte reexamination will be granted only for sufficient cause, and for a

reasonable time specified. Any request for extension in a patent owner requested ex parte reexamination (including reexamination ordered under 35 U.S.C. 257) for up to two months from the time period set in the Office action must be filed no later than two months from the expiration of the time period set in the Office action. A request for an extension in a patent owner requested ex parte reexamination for more than two months from the time period set in the Office action must be filed on or before the day on which action by the patent owner is due, and the mere filing of a request for an extension for more than two months will not effect the extension. The time for taking action in a patent owner requested ex parte reexamination will not be extended for more than two months from the time period set in the Office action in the absence of sufficient cause or for more than a reasonable time.

The filing of a timely first response to this final rejection will be construed as including a request to extend the shortened statutory period for an additional two months. In no event, however, will the statutory period for response expire later than SIX MONTHS from the mailing date of the final action. See MPEP § 2265.

Contact Information

In order to ensure full consideration of any amendments, affidavits or declarations, or other documents as evidence of patentability, such documents must be submitted in response to this Office action. Submissions after the next Office action, which is intended to be a final action, will be governed by the requirements of 37 C.F.R. § 1.116, after final

rejection and 37 C.F.R. § 41.33 after appeal, which will be strictly enforced.

All references to the Manual of Patent Examining Procedure (“MPEP”) are all to the 9th Edition, Revised, June 2020 [R-10.2019].

Extensions of time under 37 C.F.R. § 1.136(a) will not be permitted in these proceedings because the provisions of 37 C.F.R. § 1.136 apply only to “an applicant” and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that ex parte reexamination proceedings “will be conducted with special dispatch” (37 CFR 1.550(a)). Extensions of time in ex parte reexamination proceedings are provided for in 37 CFR 1.550(c).

Patent owner is reminded of the continuing responsibility under 37 C.F.R. § 1.565(a), to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving the ‘538 Patent throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286. The third party requester is similarly apprised of the ability to disclose such proceedings.

All correspondence relating to this ex parte re-exam proceeding should be directed as follows:

By U.S. Postal Service Mail to:

Mail Stop Ex Parte Re-exam

ATTN: Central Reexamination Unit
Commissioner for Patents

P.O. Box 1450 Alexandria, VA 22313-1450

Registered users of EFS-Web may alternatively submit correspondence via the electronic filing system

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at <https://efs.uspto.gov/efile/nwportal/efs-registered>
Any inquiry concerning this communication or earlier communications from the examiner should be directed to PENG KE whose telephone number is (571)272-4062. The examiner can normally be reached on M-F 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kosowski can be reached on 5712723744.

PENG KE
Examiner
Art Unit 3992

**/PENG KE/
Primary Examiner,
Art Unit 3992**

Conferees:

/William H. Wood/
Primary Examiner, Art Unit 3992

/ALEXANDER J KOSOWSKI/
Supervisory Patent Examiner, Art Unit 3992

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APPENDIX G

Reexamination Control No. 90/014,454
Patent Under Reexamination: 6,424,369
Art Unit: 3992

Dated: Dec. 10, 2020

***EX PARTE* REEXAMINATION COMMUNICATION**

DETAILED ACTION

Brief Summary

1. This is a final Office action regarding U.S. Application 90/014,454, being a reexamination of U.S. Patent 6,424,369, issued to Adair *et al.* (hereafter “the ‘369 Patent”).
2. The ‘369 Patent originally issued on July 23, 2002 with claims 1-75, being filed U.S. Application 09/638,976 (hereafter “the original ‘976 Application”) on August 15, 2000. The original ‘976 Application was filed as a continuation-in-part of U.S. Application 09/496,312, filed on February 1, 2000, which is a continuation of U.S. Application 09/175,685, filed on October 20, 1998, now U.S. Patent 6,043,839, which is a continuation-in-part of U.S. Application 08/944,322, filed on October 6, 1997, now U.S. Patent 5,929,901.
3. Reexamination of claims 1, 17, 19, 21, 22, 27, 49, 55, and 61 of the ‘369 Patent was ordered on March

27, 2020, whereby a substantial new question of patentability was raised by the Third Party's Request for *ex parte* reexamination filed February 17, 2020.

4. A non-final Office action was mailed on July 31, 2020, which indicated that claims 1, 17, 19, 21, 22, 27, 49, 55, and 61 were rejected as being unpatentable on two separate grounds of nonstatutory double patenting. Particularly, claims 1, 17, 19, 21, 22, 27, 49, 55, and 61 of the instant '369 Patent were rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1, 17, 19, 21, 22, 27, 33, 33, and 33, respectively, of U.S. Patent 6,862,036, issued to Adair *et al.* (noted as "the '036 Patent") in view of admitted prior art and/or U.S. Patent 6,202,060, issued to Tran (noted as "Tran"). Additionally, claims 1, 17, 19, 21, 22, 27, 49, 55, and 61 of the instant '369 Patent were rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1, 17, 19, 21, 22, 27, 49, 55, and 61, respectively, of U.S. Patent 6,452,626, issued to Adair *et al.* (noted as "the '626 Patent") in view of admitted prior art.

5. Subsequently, after multiple defective papers were submitted, the Patent Owner filed a response dated October 13, 2020, which was entered and made of record. The Patent Owner's response dated October 13, 2020 requests reconsideration of the cited nonstatutory double patenting rejections. With this, claims 1, 17, 19, 21, 22, 27, 49, 55, and 61 of the instant '369 Patent are subject to the instant reexamination proceeding

6. The present application is being examined under the pre-AIA first to invent provisions.

***Patent Owner's Comments –
Notice per 37 CFR § 1.565(a)***

7. Patent Owner submitted a notice on November 6, 2020. In this regard, MPEP 2282 states, in part:

. . . Persons making such submissions must limit the submissions to the notification, and must not include further arguments or information. Where a submission is not limited to bare notice of the prior or concurrent proceedings (in which a patent undergoing reexamination is or was involved), the submission will be returned, expunged or discarded by the Office.

8. It is noted that the submitted notice on November 6, 2020 contains arguments or opinions regarding judgments or decisions by the Patent Trial and Appeal Board or the Courts. Among other things, the notice alleges that the Patent Trial and Appeal Board (PTAB) violated the Administrative Procedures Act (APA). Accordingly, the notice exceeds the bare notice permitted by MPEP 2282, and such notice is not being considered, and is being expunged from the record.

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s)

because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on nonstatutory double patenting provided the reference application or patent either is shown to be commonly owned with the examined application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. See MPEP § 717.02 for applications subject to examination under the first inventor to file provisions of the AIA as explained in MPEP § 2159. See MPEP §§ 706.02(1)(1) - 706.02(1)(3) for applications not subject to examination under the first inventor to file provisions of the AIA. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO Internet website contains terminal disclaimer forms which may be used. Please visit www.uspto.gov/patent/patents-forms. The filing date of the application in which the form is filed determines what form (e.g., PTO/SB/25, PTO/SB/26, PTO/AIA/25, or PTO/AIA/26) should be used. A web-based eTerminal Disclaimer may be filled out completely online using web-screens. An eTerminal Disclaimer that meets all requirements is auto-processed and

approved immediately upon submission. For more information about eTerminal Disclaimers, refer to www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp.

10. **Claims 1, 17, 19, 21, 22, 27, 49, 55, and 61** are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1, 17, 19, 21, 22, 27, 33, 33, and 33, respectively, of U.S. Patent 6,862,036, issued to Adair *et al.* (hereafter “the Adair ‘036 Patent”) in view of admitted prior art and/or U.S. Patent 6,202,060, issued to Tran (hereafter “Tran”).

11. A claim chart below illustrates the similarities of claim 1 of the ‘369 Patent and claim 1 of the Adair ‘036 Patent.

Claim 1 of the ‘369 Patent:	The Adair ‘036 Patent claim 1:
<p>1. In <u>a PDA</u> having capability to transmit data between a personal computer connected to a communications network, the improvement comprising:</p> <p>a video system integral with <u>said PDA</u> for receiving and transmitting video images, and for viewing said video images, said video system comprising;</p>	<p>1. In <u>a wireless telephone</u> for conducting wireless telephonic communications, the improvement comprising:</p> <p>[see the last limitation of the claim, which recites “a video monitor attached to <u>said wireless phone</u> for viewing said video images, said video monitor communicating with said first circuit board, and displaying video images</p>

<p>a camera module housing an image sensor therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon, said image sensor further including circuitry means on said first plane and coupled to said array of CMOS pixels for timing and control of said array of CMOS pixels, said image sensor producing a pre-video signal, a first circuit board lying in a second plane and electrically coupled to said image sensor, said first circuit board including circuitry means for converting said pre-video signal to a desired video format;</p> <p>a video view screen attached to <u>said PDA</u> for viewing said video images, said video view screen communicating with said first circuit board, and displaying video images processed by said first circuit board.</p>	<p>processed by said first circuit board”]</p> <p>a camera module housing an image sensor therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon, said image sensor further including circuitry means on said first plane and coupled to said array of CMOS pixels for timing and control of said array of CMOS pixels, said image sensor producing a pre-video signal, a first circuit board lying in a second plane and electrically coupled to said image sensor, said first circuit board including circuitry means for converting said pre-video signal to a desired video format;</p> <p>a video monitor attached to <u>said wireless phone</u> for viewing said video images, said video monitor communicating with said first circuit board, and displaying video images processed by said first circuit board.</p>
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With this, claim 1 of the '036 Patent defines a wireless telephone having each of the claimed elements of the instant '369 Patent, but therein failing to define the elements to be included within a PDA, as claimed in the instant '369 Patent.

Initially, in reviewing the instant claims of the '369 Patent, as discussed by the Third Party Requester in the Request dated February 17, 2020, on pages 3-5, independent claims 1, 17, 49, and 55 of the '369 Patent are written in a *Jepson* format in accordance with 37 CFR 1.75(e).

In this regard, 37 CFR 1.75(e) states:

(e) Where the nature of the case admits, as in the case of an improvement, any independent claim should contain in the following order:

(1) A preamble comprising a general description of all the elements or steps of the claimed combination which are convention or known,

(2) A phrase such as 'wherein the improvement comprises,' and

(3) Those elements, steps and/or relationships which constitute that portion of the claimed combination which the applicant considers as the new or improved portion.

Further, MPEP 2129(III) states, in part:

Drafting a claim in *Jepson* format (i.e., the format described in 37 CFR 1.75(e); see MPEP § 608.01(m)) is taken as an implied admission that the subject matter of the

preamble is the prior art work of another. *In re Fout*, 675 F2d 297, 301, 213 USPQ 532, 534 (CCPA 1982) (holding preamble of *Jepson*-type claim to be admitted prior art where applicant's specification credited another as the inventor of the subject matter of the preamble).

In this regard, because claim 1 is written in *Jepson* format, such that claim 1 recites "In a PDA having capability to transmit data between a personal computer connected to a communications network, the improvement comprising. . .", the features of "a PDA having capability to transmit data between a personal computer connected to a communications network" are seen to be admitted prior art of another. Therefore, it would have been obvious to a person of ordinary skill in the art to apply the admitted prior art known element of "a PDA having capability to transmit data between a personal computer connected to a communications network" to the elements of the wireless telephone defined in the '036 Patent's claim 1.

In this regard, in discussing the Supreme Court's *KSR* decision, MPEP 2141(I) states, in part:

In *KSR*, the Supreme Court particularly emphasized "the need for caution in granting a patent based on the combination of elements found in the prior art," *Id.* at 415, 82 USPQ2d at 1395, and discussed circumstances in which a patent might be determined to be obvious. Importantly, the Supreme Court reaffirmed principles based on its precedent that "[t]he combination of familiar elements according to known methods is likely to be obvious when it

does no more than yield predictable results.” *Id.* at 415-16, 82 USPQ2d at 1395. The Supreme Court stated that there are “[t]hree cases decided after *Graham* [that] illustrate this doctrine.” *Id.* at 416, 82 USPQ2d at 1395. (1) “In *United States v. Adams*, . . . [t]he Court recognized that **when a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result.**” *Id.* (2) “In *Anderson’s-Black Rock, Inc. v. Pavement Salvage Co.*, . . . [t]he two [pre-existing elements] in combination did no more than they would in separate, sequential operation.” *Id.* at 416-17, 82 USPQ2d at 1395. (3) “[I]n *Sakraida v. AG Pro, Inc.*, the Court derived . . . the conclusion that **when a patent simply arranges old elements with each performing the same function it had been known to perform and yields no more than one would expect from such an arrangement, the combination is obvious.**” *Id.* at 417, 82 USPQ2d at 1395-96 (Internal quotations omitted.). The principle underlining these cases are instructive when the question is whether a patent application claiming the combination of elements of prior art would have been obvious. [Emphasis added].

With this, substituting a PDA for a wireless telephone, as claim 1 of the ‘369 Patent does, with respect to the Adair ‘036 Patent, the claimed elements appear to be a mere substitution of one element for another known in the field. Therefore, one of ordinary skill in the art would find that substituting a PDA instead of a video telephone would be obvious, as the admitted known elements of “a PDA having capability

to transmit data between a personal computer connected to a communications network” to the elements of the wireless telephone defined in the ‘036 Patent’s claim 1. Here, “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* at 415-16, 82 USPQ2d at 1395.

But here, if there is any question as to whether or not it would have been obvious to incorporate a video system, a camera module, and a video view screen, such as that defined in claim 1 of the Adair ‘036 Patent, within a PDA, the secondary reference of Tran clearly discloses that the structure of a PDA did include a video system, a camera module, and a video view screen.

Particularly, the prior art reference of Tran discloses in a PDA [being the “portable computer system” 10, illustrated in Fig. 1; also see col. 4, line 66-col. 5, line 11, wherein “The computer system is preferably housed in a small, rectangular portable enclosure.”] having a capability to transmit data between a personal computer connected to a communications network [see col. 2, line 52-col. 3, line 38, wherein “The portable computer can communicate directly with another computer or over the Internet using wireless media such as radio and infrared frequencies or over a landline.”; also see col. 6, lines 26-col. 7, line 27],

the improvement comprising:

a video system integral with said PDA for receiving and transmitting video images [see col. 6, lines 26-col. 7, line 27, wherein “Via the video camera 27, the 16 gray level LCD 35, and Internet access

through the modem or other connection with at least 28.8 kilo-bits-per-second capacity, the portable computer of the present invention can operate with videoconferencing software compatible with CU-SeeMe, . . . Preferably, the CU-SeeMe software in the portable computer 10 can exchange video and audio transmissions either person-to-person or in group conferences.”],

a camera module housing an image sensor therein [being the “CCD/CIS 27”, seen in Fig. 1; also see col. 6, lines 26-48, wherein “Via the PCMCIA bus 26, the computer system can acquire visual information via a charged coupled device (CCD) or a CIS unit 27. The CCD/CIS unit 27 is further connected to a lens assembly 28 for receiving and focusing light beams to the CCD or CIS for digitization. . . . In the event where the CCD/CIS unit 27 is a camera and where the application is videoconferencing, the CPU 20 and/or the DSP 23 operate to meet the ITU’s H.324 standard on multimedia terminal for low-bit-rate visual services for analog telephony.];

a video view screen attached to said PDA for viewing said video images [being the “display (LCD) 35”, seen in Fig. 1; also see col. 10, lines 17-37, wherein “When operating as an output device, the screen 35 displays computer-generated images developed by the CPU 20.”].

With this, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the invention defined in patented claim 1 of the Adair ‘036 Patent to be included within a PDA, as required in the instant independent claim 1 of the ‘369 Patent. The teachings of Tran show known structure of a PDA, which can include a video system that

comprises a camera module and a display, such that this structure, when combined with the components of the invention defined in the Adair '036 Patent, also having a camera module and a display, illustrate that it would have been obvious to one of ordinary skill in the art to include the claimed components of claim 1 of the Adair '036 Patent within a PDA, to have the invention claimed in claim 1 of the instant '369 Patent.

The suggestion/motivation for doing so would have been that the invention defined in claim 1 of the Adair '036 Patent would become more versatile, as the claimed apparatus can be utilized as a PDA, which would allow for a display system that is "portable, cost effective, and easy to use", as recognized by Tran in col. 2, lines 12-49. One skilled in the art would understand that the invention in patented claim 1 of the Adair '036 Patent can easily be modified to be within a PDA, and would yield predictable results. Therefore, it would have been obvious to combine the teachings of Tran with the invention defined in claim 1 of the Adair '036 Patent to obtain the invention as specified in claim 1 of the '369 Patent.

12. A claim chart below illustrates the similarities of claim 17 of the '369 Patent and claim 17 of the Adair '036 Patent.

Claim 17 of the '369 Patent:	The Adair '036 Patent claim 17:
17. In a <u>PDA</u> having capability to transmit data between a computer connected to a communications network, <u>the PDA</u> having a housing,	17. In a <u>video telephone</u> for conducting telephone communications to include transmitting video signals by a user of the phone, and receiving video signals

<p>and a video view screen for viewing the data which includes video signals, the improvement comprising:</p> <p>a camera module for taking video images, said camera module communicating with circuitry within <u>said PDA</u> enabling viewing on said video view screen and enabling video signals to be transmitted from said camera module to said computer, said camera module including an image sensor housed therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon, said image sensor further including circuitry means on said first plane and coupled to said CMOS pixels for timing and control of said array of said CMOS pixels for timing and control of said array of CMOS pixels, said image sensor producing a pre-video signal; and</p> <p>a first circuit board electrically connected to</p>	<p>from a party to whom a call was made, the video telephone including a housing, and a video monitor for viewing the video signals, the improvement comprising:</p> <p>a camera module for taking video images, said camera module communicating with circuitry within <u>said video telephone</u> enabling viewing on said video telephone and enabling video signals to be transmitted from said camera module for viewing by said party, said camera module including an image sensor housed therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon, said image sensor further including circuitry means on said first plane and coupled to said array of said CMOS pixels for timing and control of said array of CMOS pixels,</p> <p>a first circuit board electrically connected to</p>
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said image sensor and separated from said image sensor, said first circuit board including circuitry means for converting said pre-video signal to a desired video format.	said image sensor and residing on a second plane, said first circuit board including circuitry means for receiving a first signal produced by said image sensor and for converting said first signal to a desired video format.
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With this, claim 17 of the Adair '036 Patent defines a video telephone having each of the claimed elements of the instant '369 Patent, but therein failing to define the elements to be included within a PDA, as claimed in the instant '369 Patent.

First, similar to the discussion above regarding claim 1, in reviewing the instant claim of the '369 Patent, as discussed by the Third Party Requester in the Request dated February 17, 2020, on pages 3-5, independent claims 1, 17, 49, and 55 of the '369 Patent are written in a *Jepson* format in accordance with 37 CFR 1.75(e).

In this regard, because claim 17 is written in *Jepson* format, such that claim 17 recites "In a PDA having capability to transmit data between a computer connected to a communications network, the PDA having a housing, and a video view screen for viewing the data which includes video signals, the improvement comprising. . .", the features of "a PDA having capability to transmit data between a computer connected to a communications network, the PDA having a housing, and a video view screen for viewing the data which includes video signals" are seen to be admitted prior art of another. Therefore, it would have been obvious to a person of ordinary skill

in the art to apply the admitted prior art known element of “a PDA having capability to transmit data between a computer connected to a communications network, the PDA having a housing, and a video view screen for viewing the data which includes video signals” to the elements of the wireless telephone defined in the ‘036 Patent’s claims.

With this, substituting a PDA for a wireless video telephone, as claim 17 of the ‘369 Patent does, with respect to the Adair ‘036 Patent, the claimed elements appear to be a mere substitution of one element for another known in the field. Therefore, one of ordinary skill in the art would find that substituting a PDA instead of a video telephone would be obvious, as the admitted known elements of “a PDA having capability to transmit data between a computer connected to a communications network, the PDA having a housing, and a video view screen for viewing the data which includes video signals” to the elements of the video telephone defined in the ‘036 Patent’s claim 17. Here, “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* at 415-16, 82 USPQ2d at 1395.

But here, if there is any question as to whether or not it would have been obvious to incorporate the camera module, and the first circuit board, such as that defined in claim 17 of the Adair ‘036 Patent, within a PDA, the secondary reference of Tran clearly discloses that the structure of a PDA did include these elements.

Particularly, the prior art reference of Tran discloses in a PDA [being the “portable computer system” 10, illustrated in Fig. 1; also see col. 4, line

66-col. 5, line 11, wherein “The computer system is preferably housed in a small, rectangular portable enclosure.”] having a capability to transmit data between a computer connected to a communications network [see col. 2, line 52-col. 3, line 38, wherein “The portable computer can communicate directly with another computer or over the Internet using wireless media such as radio and infrared frequencies or over a landline.”; also see col. 6, lines 26-col. 7, line 27],

the PDA having a housing [see col. 4, line 66-col. 5, line 11, wherein “The computer system is preferably housed in a small, rectangular portable enclosure.”], and a video view screen for viewing the data which includes video signals [being the “display (LCD) 35”, seen in Fig. 1; also see col. 10, lines 17-37, wherein “When operating as an output device, the screen 35 displays computer-generated images developed by the CPU 20.”], the improvement comprising:

a camera module for taking video images [being the “CCD/CIS 27”, seen in Fig. 1],

said camera module including an image sensor housed therein [see col. 6, lines 26-48, wherein “Via the PCMCIA bus 26, the computer system can acquire visual information via a charged coupled device (CCD) or a CIS unit 27. The CCD/CIS unit 27 is further connected to a lens assembly 28 for receiving and focusing light beams to the CCD or CIS for digitization. . . . In the event where the CCD/CIS unit 27 is a camera and where the application is videoconferencing, the CPU 20 and/or the DSP 23 operate to meet the ITU’s H.324 standard on multimedia terminal for low-bit-rate visual services for analog telephony.”]; and

a first circuit board electrically connected to said image sensor and separated from said image sensor [being the CPU 20 or the DSP 23, seen in Fig. 1; also see col. 5, lines 53-64].

With this, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the invention defined in patented claim 17 of the Adair '036 Patent to be included within a PDA, as required in the instant independent claim 17 of the '369 Patent. The teachings of Tran show known structure of a PDA, which can include a camera module and a circuit board, such that this structure, when combined with the components of the invention defined in the Adair '036 Patent, also having a camera module and a circuit board, illustrate that it would have been obvious to one of ordinary skill in the art to include the claimed components of claim 17 of the Adair '036 Patent within a PDA, to have the invention claimed in claim 17 of the instant '369 Patent.

The suggestion/motivation for doing so would have been that the invention defined in claim 17 of the Adair '036 Patent would become more versatile, as the claimed apparatus can be utilized as a PDA, which would allow for a display system that is "portable, cost effective, and easy to use", as recognized by Tran in col. 2, lines 12-49. One skilled in the art would understand that the invention in patented claim 17 of the Adair '036 Patent can easily be modified to be within a PDA, and would yield predictable results. Therefore, it would have been obvious to combine the teachings of Tran with the invention defined in claim 17 of the Adair '036 Patent to obtain the invention as specified in claim 17 of the '369 Patent.

13. A claim chart below illustrates the similarities of dependent claims 19, 21, 22, and 27 of the '369 Patent and the respective dependent claims 19, 21, 22, and 27 of the Adair '036 Patent.

Claims 19, 21, 22, and 27 of the '369 Patent:	The Adair '036 Patent claims 19, 21, 22, and 27:
<p>19. A device, as claimed in claim 17, wherein:</p> <p style="padding-left: 40px;">said first circuit board is placed within said housing of <u>said PDA</u>.</p>	<p>19. A device, as claimed in claim 17, wherein:</p> <p style="padding-left: 40px;">said first circuit board is placed within said housing of <u>said telephone</u>.</p>
<p>21. A device, as claimed in claim 17, further including :</p> <p style="padding-left: 40px;">a second circuit board electrically coupled with said first circuit board and said image sensor for further processing said pre- video signal, said second board being placed adjacent said first circuit board within said camera module.</p>	<p>21. A device, as claimed in claim 17, further including :</p> <p style="padding-left: 40px;">a second circuit board electrically coupled with said first circuit board and said image sensor for further processing said first signal, said second board being placed adjacent said first circuit board within said camera module.</p>
<p>22. A device, as claimed in claim 17, wherein:</p> <p style="padding-left: 40px;">said first and second planes are offset from and substantially parallel to one another.</p>	<p>22. A device, as claimed in claim 17, wherein:</p> <p style="padding-left: 40px;">said first and second planes are offset from and substantially parallel to one another.</p>

<p>27. A device, as claimed in clam 17, wherein:</p> <p style="text-align: center;">individual pixels</p> <p>within said array of CMOS pixels each include an amplifier.</p>	<p>27. A device, as claimed in clam 17, wherein:</p> <p style="text-align: center;">individual pixels</p> <p>within said array of CMOS pixels each include an amplifier.</p>
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With this, for the same reasons as discussed above with respect to the discussion of independent claim 17, for which claims 19, 21, 22, and 27 depend on, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the invention defined in patented claim 17 (as well as dependent claims 19, 21, 22, and 27) of the Adair '036 Patent to be included within a PDA, as required in the instant independent claim 17 (and dependent claims 19, 21, 22, and 27) of the '369 Patent. The teachings of Tran show known structure of a PDA, which can include a camera module and a circuit board, such that this structure, when combined with the components of the invention defined in the Adair '036 Patent, also having a camera module and a circuit board, illustrate that it would have been obvious to one of ordinary skill in the art to include the claimed components of the claims of the Adair '036 Patent within a PDA, to have the invention claimed in claim 17, 19, 21, 22, and 27 of the instant '369 Patent.

The suggestion/motivation for doing so would have been that the invention defined in the claims of the Adair '036 Patent would become more versatile, as the claimed apparatus can be utilized as a PDA, which would allow for a display system that is "portable, cost effective, and easy to use", as recognized by Tran in col. 2, lines 12-49. One skilled in the art would understand that the invention in the patented claims

of the Adair '036 Patent can easily be modified to be within a PDA, and would yield predictable results. Therefore, it would have been obvious to combine the teachings of Tran with the invention defined in claims 19, 21, 22, and 27 of the Adair '036 Patent to obtain the invention as specified in claim 19, 21, 22, and 27 of the '369 Patent.

14. A claim chart below illustrates the similarities of claim 49 of the '369 Patent and claim 33 of the Adair '036 Patent.

Claim 49 of the '369 Patent:	The Adair '036 Patent claim 33:
<p>49. In a <u>PDA</u> having capability to transmit data between a personal computer connected to a communications network, the improvement comprising:</p> <p>a video system integral with <u>said PDA</u> for receiving and transmitting video images, and for viewing said images, said video system comprising:</p> <p>a camera module housing an image sensor therein, said image sensor lying in a first plane and including an array of</p>	<p>33. In a <u>wireless telephone</u> for conducting wireless telephone communications, the improvement comprising:</p> <p>[see the last limitation of the claim, which states “a video monitor attached to <u>said wireless phone</u> for viewing said video images, said video monitor communicating with said first circuit board, and displaying video images processed by said first circuit board”]</p> <p>a camera module housing an image sensor therein, said image sensor lying in a first plane and including an array of</p>

<p>CMOS pixels for receiving images thereon, said image sensor producing a pre-video signal, a first circuit board lying in a second plane and electrically coupled to said image sensor, said first circuit board including circuitry means for timing and control of said array of CMOS pixels and circuitry means for processing and converting said pre-video signal to a desired video format; and</p> <p>a video view screen attached to <u>said PDA</u> for viewing said video images, said video view screen communicating with said first circuit board.</p>	<p>CMOS pixels for receiving images thereon, circuitry means electrically coupled to said array of CMOS pixels, said circuitry means for timing and control being placed remote from said array of CMOS pixels on a second plane, said image sensor producing a pre-video signal, a first circuit board lying in a third plane and electrically coupled to said image sensor, said first circuit board including circuitry means for processing and converting said pre-video signal to a desired video format; and</p> <p>a video monitor attached to <u>said wireless phone</u> for viewing said video images, said video monitor communicating with said first circuit board, and displaying video images processed by said first circuit board.</p>
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With this, claim 33 of the Adair '036 Patent defines a wireless telephone being relatively identical to claim 49 of the '369 Patent, with the exception that the '369 Patent requires that the elements are to be included within a PDA, and the first circuit board lying in a second plane, with said first circuit board including circuitry means for timing and control of

said array of CMOS pixels and circuitry means for processing and converting said pre-video signal to a desired video format. In this regard, claim 33 of the Adair '036 Patent recites “circuitry means for timing and control being placed remote from said array of CMOS pixels on a second plane” and then “a first circuit board lying in a third plane . . . said first circuit board including circuitry means for processing and converting said pre-video signal to a desired video format.”

With this, claim 33 of the Adair '036 Patent recites the image sensor on a first plane, the timing and control circuitry on a second plane, and the first circuit board with processing circuitry on a third plane. But here, in looking at claim 33 of the Adair '036 Patent, it would have been obvious to one of ordinary skill in the art to have the second plane and the third plane along the same plane.

Additionally, similar to the discussion above regarding claim 1, in reviewing the instant claim of the '369 Patent, as discussed by the Third Party Requester in the Request dated February 17, 2020, on pages 3-5, independent claims 1, 17, 49, and 55 of the '369 Patent are written in a *Jepson* format in accordance with 37 CFR 1.75(e). In this regard, because claim 49 is written in *Jepson* format, such that claim 49 recites “In a PDA having capability to transmit data between a personal computer connected to a communications network, the improvement comprising . . .”, the features of “a PDA having capability to transmit data between a personal computer connected to a communications network” are seen to be admitted prior art of another. Therefore, it would have been obvious to a person of

ordinary skill in the art to apply the admitted prior art known element of “a PDA having capability to transmit data between a personal computer connected to a communications network” to the elements of the wireless telephone defined in the ‘036 Patent’s claims.

With this, substituting a PDA for a wireless telephone, as claim 49 of the ‘369 Patent does, with respect to claim 33 of the Adair ‘036 Patent, the claimed elements appear to be a mere substitution of one element for another known in the field. Therefore, one of ordinary skill in the art would find that substituting a PDA instead of a video telephone would be obvious, as the admitted known elements of “a PDA having capability to transmit data between a personal computer connected to a communications network” to the elements of the video telephone defined in the ‘036 Patent’s claim 33. Here, “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* at 415-16, 82 USPQ2d at 1395.

But here, if there is any question as to whether or not it would have been obvious to incorporate the camera module and a video monitor, such as that defined in claim 33 of the Adair ‘036 Patent, within a PDA, the secondary reference of Tran clearly discloses that the structure of a PDA did include these elements.

Particularly, the prior art reference of Tran discloses in a PDA [being the “portable computer system” 10, illustrated in Fig. 1; also see col. 4, line 66-col. 5, line 11, wherein “The computer system is preferably housed in a small, rectangular portable enclosure.”] having a capability to transmit data between a computer connected to a communications

network [see col. 2, line 52-col. 3, line 38, wherein “The portable computer can communicate directly with another computer or over the Internet using wireless media such as radio and infrared frequencies or over a landline.”; also see col. 6, lines 26-col. 7, line 27], the improvement comprising:

a camera module housing an image sensor therein [see col. 4, line 66-col. 5, line 11, wherein “The computer system is preferably housed in a small, rectangular portable enclosure.”],

for taking video images [being the “CCD/CIS 27”, seen in Fig. 1], said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon [see col. 6, lines 26-48, wherein “Via the PCMCIA bus 26, the computer system can acquire visual information via a charged coupled device (CCD) or a CIS unit 27. The CCD/CIS unit 27 is further connected to a lens assembly 28 for receiving and focusing light beams to the CCD or CIS for digitization. . . . In the event where the CCD/CIS unit 27 is a camera and where the application is videoconferencing, the CPU 20 and/or the DSP 23 operate to meet the ITU’s H.324 standard on multimedia terminal for low-bit-rate visual services for analog telephony.”];

a first circuit board lying in a second plane and electrically coupled to said image sensor [being the CPU 20 and the DSP 23, seen in Fig. 1; also see col. 5, lines 53-64, wherein “Although the DSP 23 is shown as a separate unit from the CPU 20, the present invention contemplates that the DSP 23 can also be integrated with the CPU 20 whereby the CPU 20 can rapidly execute multiply-accumulate (MAC) instructions in either scalar or vector mode.”], said

first circuitry board including circuitry means for timing and control of said array of CMOS pixels [see col. 6, lines 26-48] and circuitry means for processing and converting said pre-video signal to a desired video format [see col. 5, lines 53-59, wherein “The DSP 23 is optimized for video compression using JPEG/MPEG standards known to those skilled in the art.”; also see col. 6, lines 26-48]; and

a video monitor attached to said wireless phone for viewing said video images [being the “display (LCD) 35”, seen in Fig. 1; also see col. 10, lines 17-37, wherein “When operating as an output device, the screen 35 displays computer-generated images developed by the CPU 20.”].

With this, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the invention defined in patented claim 33 of the Adair ‘036 Patent to be included within a PDA, as required in the instant independent claim 49 of the ‘369 Patent. The teachings of Tran show known structure of a PDA, which can include a camera module and a video view screen, such that this structure, when combined with the components of the invention defined in the Adair ‘036 Patent, also having a camera module and a video view screen, illustrate that it would have been obvious to one of ordinary skill in the art to include the claimed components of claim 33 of the Adair ‘036 Patent within a PDA, to have the invention claimed in claim 49 of the instant ‘369 Patent. Further, it also would have been obvious to one of ordinary skill in the art to have the circuitry means for timing and control of said array of CMOS pixels and circuitry means for processing and converting said pre-video signal to a

desired video format, both being included in the same circuit board lying in the same plane, as disclosed by the reference of Tran.

The suggestion/motivation for doing so would have been that the invention defined in claim 33 of the Adair '036 Patent would allow for a more efficient operation with the combined processing of the circuitry means for timing and control of said array of CMOS pixels and circuitry means for processing and converting said pre-video signal to a desired video format, as Tran recognized in col. 5, lines 59-64 that the CPU "can rapidly execute multiply-accumulate (MAC) instructions in either scalar or vector mode". Additionally, the invention defined in claim 33 of the Adair '036 Patent would become more versatile, as the claimed apparatus can be utilized as a PDA, which would allow for a display system that is "portable, cost effective, and easy to use", as recognized by Tran in col. 2, lines 12-49. One skilled in the art would understand that the invention in patented claim 33 of the Adair '036 Patent can easily be modified incorporate the teachings of Tran and to be within a PDA, and would yield predictable results. Therefore, it would have been obvious to combine the teachings of Tran with the invention defined in claim 33 of the Adair '036 Patent to obtain the invention as specified in claim 49 of the '369 Patent.

15. A claim chart below illustrates the similarities of claim 55 of the '369 Patent and claim 33 of the Adair '036 Patent.

Claim 55 of the '369 Patent:	The Adair '036 Patent claim 33:
55. In <u>a PDA</u> having capability to transmit data	33. In <u>a wireless telephone</u> for conducting wireless

<p>between a personal computer connected to a communications network, <u>the PDA</u> including a video view screen for viewing video images, the improvement comprising:</p> <p>a camera module for taking video images, said camera module communicating with circuitry within <u>said PDA</u> enabling viewing on said video view screen and enabling video signals to be transmitted from said camera module to the personal computer,</p> <p>said camera module including an image sensor housed therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon, said image sensor producing a pre-video signal,</p> <p>a first circuit board lying in a second plane and electrically connected to said image sensor, said first circuit board including circuitry means for timing and control of said array of CMOS pixels</p>	<p>telephone communications, the improvement comprising:</p> <p>[see the last limitation of the claim, which states “a video monitor attached to <u>said wireless phone</u> for viewing said video images, said video monitor communicating with said first circuit board, and displaying video images processed by said first circuit board”]</p> <p>a camera module housing an image sensor therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon,</p> <p>circuitry means electrically coupled to said array of CMOS pixels, said circuitry means for timing and control being placed remote from said array of CMOS pixels on a second plane, said image sensor</p>
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<p>and circuitry means for processing and converting said pre-video signal to a desired video format.</p>	<p>producing a pre-video signal, a first circuit board lying in a third plane and electrically coupled to said image sensor, said first circuit board including circuitry means for processing and converting said pre-video signal to a desired video format; and</p> <p>a video monitor attached to <u>said wireless phone</u> for viewing said video images, said video monitor communicating with said first circuit board, and displaying video images processed by said first circuit board.</p>
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With this, claim 33 of the Adair '036 Patent defines a wireless telephone being relatively identical to claim 55 of the '369 Patent, with the exception that the '369 Patent requires that the elements are to be included within a PDA, and the first circuit board lying in a second plane, with said first circuit board including circuitry means for timing and control of said array of CMOS pixels and circuitry means for processing and converting said pre-video signal to a desired video format. In this regard, claim 33 of the Adair '036 Patent recites "circuitry means for timing and control being placed remote from said array of CMOS pixels on a second plane" and then "a first circuit board lying in a third plane . . . said first circuit board including circuitry means for processing and converting said pre-video signal to a desired video

format.” Here, claim 33 of the Adair ‘036 Patent recites the image sensor on a first plane, the timing and control circuitry on a second plane, and the first circuit board with processing circuitry on a third plane. But here, in looking at claim 33 of the Adair ‘036 Patent, it would have been obvious to one of ordinary skill in the art to have the second plane and the third plane along the same plane.

Additionally, similar to the discussion above regarding claim 1, in reviewing the instant claim of the ‘369 Patent, as discussed by the Third Party Requester in the Request dated February 17, 2020, on pages 3-5, independent claims 1, 17, 49, and 55 of the ‘369 Patent are written in a *Jepson* format in accordance with 37 CFR 1.75(e). In this regard, because claim 55 is written in *Jepson* format, such that claim 49 recites “In a PDA having capability to transmit data between a personal computer connected to a communications network, the PDA including a video view screen for viewing video images, the improvement comprising. . .”, the features of “a PDA having capability to transmit data between a personal computer connected to a communications network, the PDA including a video view screen for viewing video images” are seen to be admitted prior art of another. Therefore, it would have been obvious to a person of ordinary skill in the art to apply the admitted prior art known element of “a PDA having capability to transmit data between a personal computer connected to a communications network, the PDA including a video view screen for viewing video images” to the elements of the wireless telephone defined in claim 33 of the ‘036 Patent.

With this, substituting a PDA for a wireless telephone, as claim 55 of the '369 Patent does, with respect to claim 33 of the Adair '036 Patent, the claimed elements appear to be a mere substitution of one element for another known in the field. Therefore, one of ordinary skill in the art would find that substituting a PDA instead of a video telephone would be obvious, as the admitted known elements of “a PDA having capability to transmit data between a personal computer connected to a communications network, the PDA including a video view screen for viewing video images” to the elements of the video telephone defined in the '036 Patent's claim 33. Here, “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* at 415-16, 82 USPQ2d at 1395.

But here, if there is any question as to whether or not it would have been obvious to incorporate the camera module and a video monitor, such as that defined in claim 33 of the Adair '036 Patent, within a PDA, the secondary reference of Tran clearly discloses that the structure of a PDA did include these elements.

Particularly, the prior art reference of Tran discloses in a PDA [being the “portable computer system” 10, illustrated in Fig. 1; also see col. 4, line 66-col. 5, line 11, wherein “The computer system is preferably housed in a small, rectangular portable enclosure.”] having a capability to transmit data between a computer connected to a communications network [see col. 2, line 52-col. 3, line 38, wherein “The portable computer can communicate directly with another computer or over the Internet using wireless

media such as radio and infrared frequencies or over a landline.”; also see col. 6, lines 26-col. 7, line 27], the improvement comprising:

a camera module housing an image sensor therein [see col. 4, line 66-col. 5, line 11, wherein “The computer system is preferably housed in a small, rectangular portable enclosure.”],

for taking video images [being the “CCD/CIS 27”, seen in Fig. 1], said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon [see col. 6, lines 26-48, wherein “Via the PCMCIA bus 26, the computer system can acquire visual information via a charged coupled device (CCD) or a CIS unit 27. The CCD/CIS unit 27 is further connected to a lens assembly 28 for receiving and focusing light beams to the CCD or CIS for digitization. . . . In the event where the CCD/CIS unit 27 is a camera and where the application is videoconferencing, the CPU 20 and/or the DSP 23 operate to meet the ITU’s H.324 standard on multimedia terminal for low-bit-rate visual services for analog telephony.”];

a first circuit board lying in a second plane and electrically coupled to said image sensor [being the CPU 20 and the DSP 23, seen in Fig. 1; also see col. 5, lines 53-64, wherein “Although the DSP 23 is shown as a separate unit from the CPU 20, the present invention contemplates that the DSP 23 can also be integrated with the CPU 20 whereby the CPU 20 can rapidly execute multiply-accumulate (MAC) instructions in either scalar or vector mode.”], said first circuitry board including circuitry means for timing and control of said array of CMOS pixels [see col. 6, lines 26-48] and circuitry means for processing

and converting said pre-video signal to a desired video format [see col. 5, lines 53-59, wherein “The DSP 23 is optimized for video compression using JPEG/MPEG standards known to those skilled in the art.”; also see col. 6, lines 26-48]; and

a video monitor attached to said wireless phone for viewing said video images [being the “display (LCD)35”, seen in Fig. 1; also see col. 10, lines 17-37, wherein “When operating as an output device, the screen 35 displays computer-generated images developed by the CPU 20.”].

With this, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the invention defined in patented claim 33 of the Adair ‘036 Patent to be included within a PDA, as described by the reference of Tran, as required in the instant independent claim 55 of the ‘369 Patent. The teachings of Tran show known structure of a PDA, which can include a camera module and a video view screen, such that this structure, when combined with the components of the invention defined in the Adair ‘036 Patent, also having a camera module and a video view screen, illustrate that it would have been obvious to one of ordinary skill in the art to include the claimed components of claim 33 of the Adair ‘036 Patent within a PDA, to have the invention claimed in claim 55 of the instant ‘369 Patent. Further, it also would have been obvious to one of ordinary skill in the art to have the circuitry means for timing and control of said array of CMOS pixels and circuitry means for processing and converting said pre-video signal to a desired video format, both being included in the same circuit board lying in the same plane, as disclosed by the reference of Tran.

The suggestion/motivation for doing so would have been that the invention defined in claim 33 of the Adair '036 Patent would allow for a more efficient operation with the combined processing of the circuitry means for timing and control of said array of CMOS pixels and circuitry means for processing and converting said pre-video signal to a desired video format, as Tran recognized in col. 5, lines 59-64 that the CPU "can rapidly execute multiply-accumulate (MAC) instructions in either scalar or vector mode". Additionally, the invention defined in claim 33 of the Adair '036 Patent would become more versatile, as the claimed apparatus can be utilized as a PDA, which would allow for a display system that is "portable, cost effective, and easy to use", as recognized by Tran in col. 2, lines 12-49. One skilled in the art would understand that the invention in patented claim 33 of the Adair '036 Patent can easily be modified incorporate the teachings of Tran and to be within a PDA, and would yield predictable results. Therefore, it would have been obvious to combine the teachings of Tran with the invention defined in claim 33 of the Adair '036 Patent to obtain the invention as specified in claim 55 of the '369 Patent.

16. A claim chart below illustrates the similarities of claim 61 of the '369 Patent and claim 33 of the Adair '036 Patent.

Claim 61 of the '369 Patent:	The Adair '036 Patent claim 33:
61. A <u>PDA</u> having capability for receiving and transmitting video and audio images between the PDA and a personal	33. In a <u>wireless telephone</u> for conducting wireless telephone communications, the improvement comprising:

<p>computer connected to a communications network, said PDA comprising:</p> <p>an image sensor lying in a first plane including an array of CMOS pixels for receiving images thereon, said image sensor producing a pre-video signal;</p> <p>a first circuit board electrically communicating with said image sensor and separated from said image sensor, said first circuit board including circuitry means for timing and control of said array of CMOS pixels and circuitry means for processing and converting said pre-video signal to a desired video format;</p> <p>a camera module housing said image sensor;</p>	<p>a camera module housing an image sensor therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon,</p> <p>[also see limitation below, which states “said image sensor producing a pre-video signal”]</p> <p>circuitry means electrically coupled to said array of CMOS pixels, said circuitry means for timing and control being placed remote from said array of CMOS pixels on a second plane, said image sensor producing a pre-video signal, a first circuit board lying in a third plane and electrically coupled to said image sensor, said first circuit board including circuitry means for processing and converting said pre-video signal to a desired video format; and</p> <p>[see limitation above, which states “a camera</p>
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<p>a transceiver/amplifier section electrically coupled to said first circuit board for transmitting, receiving, and amplifying video and audio signals;</p> <p>a digital signal processor electrically coupled to said first circuit board and said transceiver/amplifier section, said digital signal processor further conditioning said pre-video signal which is first conditioned by said first circuit board, and also for conditioning video and audio signals from said transceiver/amplifier section;</p> <p>a microphone electrically communicating with said digital signal processor for recording and receiving audio signals;</p> <p>a speaker electrically communicating with said digital signal processor for broadcasting audio signals;</p> <p>a video view screen attached to <u>said PDA</u>, said video view screen for selectively displaying images from said imaging</p>	<p>module housing an image sensor therein,"]</p> <p>a video monitor attached to <u>said wireless phone</u> for viewing said video images, said video monitor communicating</p>
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<p>device, and for selectively displaying video images received by said transceiver/amplifier section:</p> <p>a video switch communicating with said first circuit board and said digital signal processor for switching video images to be viewed on said video view screen; and</p> <p>a power supply mounted to <u>said PDA</u> for providing power thereto.</p>	<p>with said first circuit board, and displaying video images processed by said first circuit board.</p>
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With this, claim 33 of the Adair '036 Patent does define a wireless telephone having some features and functionality of claim 61 of the '369 Patent, but lacks the specific structure of these elements to be within a PDA, and that the PDA also comprises having a transceiver/amplifier section, a digital signal processor, a microphone, a speaker, a video switch, and a power supply.

But the prior art reference of Tran discloses in a PDA [being the "portable computer system" 10, illustrated in Fig. 1; also see col. 4, line 66-col. 5, line 11, wherein "The computer system is preferably housed in a small, rectangular portable enclosure."] having a capability for receiving and transmitting video and audio images between the PDA and a personal computer connected to a communications network [see col. 2, line 52-col. 3, line 38, wherein "The portable computer can communicate directly with another computer or over the Internet using wireless

media such as radio and infrared frequencies or over a landline.”; also see col. 6, lines 26-col 7, line 27], said PDA comprising:

an image sensor for receiving images thereon [being the “CCD/CIS 27”, seen in Figs. 1, 2A, and 2B; also see col. 6, lines 26-48, wherein “Via the PCMCIA bus 26, the computer system can acquire visual information via a charged coupled device (CCD) or a CIS unit 27. The CCD/CIS unit 27 is further connected to a lens assembly 28 for receiving and focusing light beams to the CCD or CIS for digitization. . . . In the event where the CCD/CIS unit 27 is a camera and where the application is videoconferencing, the CPU 20 and/or the DSP 23 operate to meet the ITU’s H.324 standard on multimedia terminal for low-bit-rate visual services for analog telephony.”];

a first circuit board electrically communicating with said image sensor and separated from said image sensor [being the CPU 20 and the DSP 23, seen in Fig. 1; also see col. 5, lines 53-64, wherein “Although the DSP 23 is shown as a separate unit from the CPU 20, the present invention contemplates that the DSP 23 can also be integrated with the CPU 20 whereby the CPU 20 can rapidly execute multiply-accumulate (MAC) instructions in either scalar or vector mode.”], said first circuit board including circuitry means for timing and control of said array of CMOS pixels [see col. 6, lines 26-48] and circuitry means for processing and converting said pre-video signal to a desired video format [see col. 5, lines 53-59, wherein “The DSP 23 is optimized for video compression using JPEG/MPEG standards known to those skilled in the art”; also see col. 6, lines 26-48];

a camera module housing said image sensor [CCD/CIS 27 and lens assembly 28, see Fig. 1; also see col. 6, lines 26-37];

a transceiver/amplifier section electrically coupled to said first circuit board for transmitting, receiving, and amplifying video and audio signals [being the “wireless transceiver 31”, seen in Figs. 1; also see col. 14, line 57-col. 15, line 20];

a digital signal processor [being the “digital signal processor 23”, seen in Fig. 1; also see col. 5, lines 53-64] electrically coupled to said first circuit board and said transceiver/amplifier section, said digital signal processor further conditioning said pre-video signal which is first conditioned by said first circuit board, and also for conditioning video and audio signals from said transceiver/amplifier section [see col. 5, lines 53-59, wherein “The DSP 23 is optimized for video compression using JPEG/MPEG standards known to those skilled in the art.”; also see col. 6, lines 26-48];

a microphone electrically communicating with said digital signal processor for recording and receiving audio signals [being “microphone 44”, seen in Fig. 1; also see col. 13, lines 43-55];

a speaker electrically communicating with said digital signal processor for broadcasting audio signals [being “speaker 45” and “speakers 94 and 95”, seen in Fig. 1; also see col. 13, lines 43-55; also see col. 14, lines 14, lines 57-64];

a video view screen attached to said PDA, said video view screen for selectively displaying images from said imaging device, and for selectively displaying video images received by said

transceiver/amplifier section [being the “display (LCD) 35”, seen in Fig. 1; also see col 10, lines 17-37, wherein “When operating as an output device, the screen 35 displays computer-generated images developed by the CPU 20.”];

a video switch communicating with said first circuit board and said digital signal processor for switching video images to be viewed on said video view screen [interpreted as the “keypad 24” seen in Fig. 1; also see col. 5, line 65-col. 6, line 12, wherein “The computer system of the present invention receives instructions from the user via one or more switches such as push-button switches in a keypad 24.”]; and

a power supply mounted to said PDA for providing power thereto [being the “back-up battery”, see col. 5, lines 11-27].

With this, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the invention defined in patented claim 33 of the Adair ‘036 Patent to be included within a PDA, as described by the reference of Tran, as required in the instant independent claim 61 of the ‘369 Patent. The teachings of Tran show known structure of a PDA, which can include a camera module and a video view screen, as well as having a transceiver/amplifier section, a digital signal processor, a microphone, a speaker, a video switch, and a power supply, such that this structure, when combined with the components of the invention defined in the Adair ‘036 Patent, also having a camera module and a video view screen, illustrate that it would have been obvious to one of ordinary skill in the art to include the claimed components of claim 33 of the Adair ‘036 Patent

within a PDA, to have the invention claimed in claim 61 of the instant '369 Patent. Further, it also would have been obvious to one of ordinary skill in the art to have the circuitry means for timing and control of said array of CMOS pixels and circuitry means for processing and converting said pre-video signal to a desired video format, both being included in the same circuit board, as disclosed by the reference of Tran.

The suggestion/motivation for doing so would have been that the invention defined in claim 33 of the Adair '036 Patent would allow for a more efficient operation with the combined processing of the circuitry means for timing and control of said array of CMOS pixels and circuitry means for processing and converting said pre-video signal to a desired video format, as Tran recognized in col. 5, lines 59-64 that the CPU "can rapidly execute multiply-accumulate (MAC) instructions in either scalar or vector mode". Additionally, the invention defined in claim 33 of the Adair '036 Patent would become more versatile, as the claimed apparatus can be utilized as a PDA, which would allow for a display system that is "portable, cost effective, and easy to use", as recognized by Tran in col. 2, lines 12-49. One skilled in the art would understand that the invention in patented claim 33 of the Adair '036 Patent can easily be modified incorporate the teachings of Tran and to be within a PDA, and would yield predictable results. Therefore, it would have been obvious to combine the teachings of Tran with the invention defined in claim 33 of the Adair '036 Patent to obtain the invention as specified in claim 61 of the '369 Patent.

17. **Claims 1, 17, 19, 21, 22, 27, 49, 55, and 61** are rejected on the ground of nonstatutory double

patenting as being unpatentable over claims 1, 17, 19, 21, 22, 27, 49, 55, and 61, respectively, of U.S. Patent 6,452,626, issued to Adair *et al.* (hereafter “the Adair ‘626 Patent”) in view of admitted prior art.

18. A claim chart below illustrates the similarities of claim 1 of the ‘369 Patent and claim 1 of the Adair ‘626 Patent.

Claim 1 of the ‘369 Patent:	The Adair ‘626 Patent claim 1:
<p>1. In <u>a PDA</u> having capability to transmit data between a personal computer connected to a communications network, the improvement comprising:</p> <p style="padding-left: 40px;">a video system integral with <u>said PDA</u> for receiving and transmitting video images, and for viewing said video images, said video system comprising:</p> <p style="padding-left: 40px;">a camera module housing an image sensor therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon, said image sensor further including circuitry means on said first plane and coupled to said array of CMOS pixels for timing and control of</p>	<p>1. In <u>a wireless telephone</u> for conducting wireless telephonic communications, the improvement comprising:</p> <p style="padding-left: 40px;">a video system integral with <u>said telephone</u> for receiving and transmitting video images, and for viewing said video images, said video system comprising;</p> <p style="padding-left: 40px;">a camera module housing an image sensor therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon, said image sensor further including circuitry means on said first plane and coupled to said array of CMOS pixels for timing and control of said array of CMOS pixels,</p>

<p>said array of CMOS pixels, said image sensor producing a pre-video signal, a first circuit board lying in a second plane and electrically coupled to said image sensor, said first circuit board including circuitry means for converting said pre-video signal to a desired video format;</p> <p>a video view screen attached to <u>said PDA</u> for viewing said video images, said video view screen communicating with said first circuit board, and displaying video images processed by said first circuit board.</p>	<p>said image sensor producing a pre-video signal, a first circuit board lying in a second plane and electrically coupled to said image sensor, said first circuit board including circuitry means for converting said pre-video signal to a desired video format;</p> <p>a video monitor attached to <u>said wireless phone</u> for viewing said video images, said video monitor communicating with said first circuit board, and displaying video images processed by said first circuit board.</p>
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With this, claim 1 of the '626 Patent defines a wireless telephone having each of the particular claimed elements of claim 1 of the instant '369 Patent, but therein failing to define the elements to be included within a PDA, as claimed in the instant '369 Patent.

In this regard, as discussed above, because claim 1 is written in *Jepson* format, such that claim 49 recites "In a PDA having capability to transmit data between a personal computer connected to a communications network, the improvement comprising...", the features of "a PDA having capability to transmit data between a personal computer connected to a communications network"

are seen to be admitted prior art of another. Therefore, it would have been obvious to a person of ordinary skill in the art to apply the admitted prior art known element of “a PDA having capability to transmit data between a personal computer connected to a communications network” to the elements of the wireless telephone defined in the Adair ‘626 Patent’s claim 1.

With this, substituting a PDA for a wireless telephone, as claim 1 of the ‘369 Patent does, with respect to claim 1 of the Adair ‘626 Patent, the claimed elements appear to be a mere substitution of one element for another known in the field. Therefore, one of ordinary skill in the art would find that substituting a PDA instead of a wireless video telephone would be obvious, as the admitted known elements of “a PDA having capability to transmit data between a personal computer connected to a communications network” to the elements of the wireless telephone defined in the ‘626 Patent’s claim 1. Here, “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* at 415-16, 82 USPQ2d at 1395.

The suggestion/motivation for doing so would have been that the invention defined in claim 1 of the Adair ‘626 Patent would become more versatile, as the claimed apparatus can be utilized as a PDA, being a “popular item” to those of ordinary skill in the art, whereby as recognized by the ‘369 Patent itself, in col. 3, lines 36-46, the ‘369 Patent states “Recently, devices known as palm top computers, PDA(s), or hand-held computers have become very popular items. Essentially, these PDAs are miniature

computer, small enough to be held in the hand, which have various software programs available to a user . . .” One skilled in the art would understand that the invention in patented claim 1 of the Adair ‘626 Patent can easily be modified to be within a PDA, and would yield predictable results. Therefore, it would have been obvious to combine the admitted prior art of a PDA with the invention defined in claim 1 of the Adair ‘626 Patent to obtain the invention as specified in claim 1 of the ‘369 Patent.

19. A claim chart below illustrates the similarities of claim 17 of the ‘369 Patent and claim 17 of the Adair ‘626 Patent.

Claim 17 of the ‘369 Patent:	The Adair ‘626 Patent claim 17:
<p>17. In a <u>PDA</u> having capability to transmit data between a computer connected to a communications network, <u>the PDA</u> having a housing, and a video view screen for viewing the data which includes video signals, the improvement comprising:</p> <p>a camera module for taking video images, said camera module communicating with circuitry within <u>said PDA</u> enabling viewing on said video view screen and</p>	<p>17. In a <u>video telephone</u> for receiving and transmitting telephone communications to include video signals transmitted by the user of the phone, and video signals received from the party to whom a call was made, the video telephone including housing, and a video monitor for viewing the video signals, the improvement comprising:</p> <p>a camera module for taking video images, said camera module communicating with circuitry within <u>said video telephone</u> and enabling viewing on said video</p>

<p>enabling video signals to be transmitted from said camera module to said computer, said camera module including an image sensor housed therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon, said image sensor further including circuitry means on said first plane and coupled to said CMOS pixels for timing and control of said array of said CMOS pixels for timing and control of said array of CMOS pixels, said image sensor producing a pre-video signal; and</p> <p>a first circuit board electrically connected to said image sensor and separated from said image sensor, said first circuit board including circuitry means for converting said pre-video signal to a desired video format.</p>	<p>telephone and enabling video signals to be transmitted from said camera module for viewing by said party, said camera module including an image sensor housed therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon, said image sensor further including circuitry means on said first plane and coupled to said CMOS pixels for timing and control of said array of said CMOS pixels for timing and control of said array of CMOS pixels, said image sensor producing a pre-video signal; and</p> <p>a first circuit board electrically connected to said image sensor and residing on a second plane, said first circuit board including circuitry means for converting said pre-video signal to a desired video format.</p>
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With this, claim 17 of the '626 Patent defines a wireless telephone having each of the particular claimed elements of claim 17 of the instant '369 Patent, but therein failing to define the elements to be included within a PDA, as claimed in the instant '369 Patent.

In this regard, as discussed above, because claim 17 is written in *Jepson* format, such that claim 17 recites "In a PDA having capability to transmit data between a computer connected to a communications network, the PDA having a housing, and a video view screen for viewing the data which includes video signals, the improvement comprising . . .", the features of "a PDA having capability to transmit data between a computer connected to a communications network, the PDA having a housing, and a video view screen for viewing the data which includes video signals" are seen to be admitted prior art of another. Therefore, it would have been obvious to a person of ordinary skill in the art to apply the admitted prior art known element of "a PDA having capability to transmit data between a personal computer connected to a communications network, the PDA having a housing, and a video view screen for viewing the data which includes video signals" to the elements of the wireless telephone defined in the Adair '626 Patent's claim 17.

With this, substituting a PDA for a wireless telephone, as claim 17 of the '369 Patent does, with respect to claim 17 of the Adair '626 Patent, the claimed elements appear to be a mere substitution of one element for another known in the field. Therefore, one of ordinary skill in the art would find that substituting a PDA instead of a wireless video

telephone would be obvious, as the admitted known elements of “a PDA having capability to transmit data between a personal computer connected to a communications network” to the elements of the wireless telephone defined in the ‘626 Patent’s claim 17. Here, “[t]he combination of familiar elements according to known methods is likely to be obvious “when it does no more than yield predictable results.” *Id.* at 415-16, 82 USPQ2d 1395.

The suggestion/motivation for doing so would have been that the invention defined in claim 17 of the Adair ‘626 Patent would become more versatile, as the claimed apparatus can be utilized as a PDA, being a “popular item” to those of ordinary skill in the art, whereby as recognized by the ‘369 Patent itself, in col. 3, lines 36-46, the ‘369 Patent states “Recently, devices known as palm top computers, PDA(s), or hand-held computers have become very popular items. Essentially, these PDAs are miniature computer, small enough to be held in the hand, which have various software programs available to a user . . .” One skilled in the art would understand that the invention in patented claim 17 of the Adair ‘626 Patent can easily be modified to be within a PDA, and would yield predictable results. Therefore, it would have been obvious to combine the admitted prior art of a PDA with the invention defined in claim 17 of the Adair ‘626 Patent to obtain the invention as specified in claim 17 of the ‘369 Patent.

20. A claim chart below illustrates the similarities of dependent claims 19, 21, 22, and 27 of the ‘369 Patent and the respective dependent claims 19, 21, 22, and 27 of the Adair ‘626 Patent.

Claims 19, 21, 22, and 27 of the '369 Patent:	The Adair '626 Patent claims 19, 21, 22, and 27:
<p>19. A device, as claimed in claim 17, wherein:</p> <p style="padding-left: 40px;">said first circuit board is placed within said housing of <u>said PDA</u>.</p> <p>21. A device, as claimed in claim 17, further including:</p> <p style="padding-left: 40px;">a second circuit board electrically coupled with said first circuit board and said image sensor for further processing said pre-video signal, said second board being placed adjacent said first circuit board within said camera module.</p> <p>22. A device, as claimed in claim 17, wherein:</p> <p style="padding-left: 40px;">said first and second planes are offset from and substantially parallel to one another.</p> <p>27. A device, as claimed in claim 17, wherein:</p> <p style="padding-left: 40px;">individual pixels within said array of CMOS pixels each include an amplifier.</p>	<p>19. A device, as claimed in claim 17, wherein:</p> <p style="padding-left: 40px;">said first circuit board is placed within said housing of <u>said telephone</u>.</p> <p>21. A device, as claimed in claim 17, further including :</p> <p style="padding-left: 40px;">a second circuit board electrically coupled with said first circuit board and said image sensor for further processing said pre-video signal, said second board being placed adjacent said first circuit board within said camera module.</p> <p>22. A device, as claimed in claim 17, wherein:</p> <p style="padding-left: 40px;">said first and second planes are offset from and substantially parallel to one another.</p> <p>27. A device, as claimed in claim 17, wherein:</p> <p style="padding-left: 40px;">individual pixels within said array of CMOS pixels each include an amplifier.</p>

With this, for the same reasons as discussed above with respect to the discussion of independent claim 17, for which claims 19, 21, 22, and 27 depend on, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the invention defined in patented claim 17 (as well as dependent claims 19, 21, 22, and 27) of the Adair '626 Patent to be included within a PDA, as required in the instant independent claim 17 (and dependent claims 19, 21, 22, and 27) of the '369 Patent.

Along this vein, substituting a PDA for a wireless telephone, as the claims of the '369 Patent does, with respect to the respective claims of the Adair '626 Patent, the claimed elements appear to be a mere substitution of one element for another known in the field. Therefore, one of ordinary skill in the art would find that substituting a PDA instead of a wireless video telephone would be obvious, as the admitted known elements of "a PDA having capability to transmit data between a personal computer connected to a communications network" to the elements of the wireless telephone defined in the '626 Patent's claims 17, 19, 21, 22, and 27. Here, "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *Id.* at 415-16, 82 USPQ2d at 1395.

The suggestion/motivation for doing so would have been that the invention defined in claims 17, 19, 21, 22, and 27 of the Adair '626 Patent would become more versatile, as the claimed apparatus can be utilized as a PDA, being a "popular item" to those of ordinary skill in the art, whereby as recognized by the '369 Patent itself, in col. 3, lines 36-46, the '369 Patent

states “Recently, devices known as palm top computers, PDA(s), or hand-held computers have become very popular items. Essentially, these PDAs are miniature computer, small enough to be held in the hand, which have various software programs available to a user . . .” One skilled in the art would understand that the invention in patented claim 17, 19, 21, 22, and 27 of the Adair ‘626 Patent can easily be modified to be within a PDA, and would yield predictable results. Therefore, it would have been obvious to combine the admitted prior art of a PDA with the invention defined in claims 17, 19, 21, 22, and 27 of the Adair ‘626 Patent to obtain the invention as specified in claim 17, 19, 21, 22, and 27 of the ‘369 Patent.

21. A claim chart below illustrates the similarities of claim 49 of the ‘369 Patent and claim 49 of the Adair ‘626 Patent.

Claim 49 of the ‘369 Patent:	The Adair ‘626 Patent claim 49:
<p>49. In a <u>PDA</u> having capability to transmit data between a personal computer connected to a communications network, the improvement comprising:</p> <p>a video system integral with <u>said PDA</u> for receiving and transmitting video images, and for viewing said images, said video system comprising:</p>	<p>49. In a <u>wireless telephone</u> for conducting wireless telephone communications, the improvement comprising:</p> <p>a video system integral with <u>said telephone</u> for receiving and transmitting video images, and for viewing said images, said video system comprising:</p>

<p>a camera module housing an image sensor therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon, said image sensor producing a pre-video signal, a first circuit board lying in a second plane and electrically coupled to said image sensor, said first circuit board including circuitry means for timing and control of said array of CMOS pixels and circuitry means for processing and converting said pre-video signal to a desired video format; and</p> <p>a video view screen attached to <u>said PDA</u> for viewing said video images, said video view screen communicating with said first circuit board.</p>	<p>a camera module housing an image sensor therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon, said image sensor producing a pre-video signal, a first circuit board lying in a second plane and electrically coupled to said image sensor, said first circuit board including circuitry means for timing and control of said array of CMOS pixels and circuitry means for processing and converting said pre-video signal to a desired video format; and</p> <p>a video monitor attached to <u>said wireless phone</u> for viewing said video images, said video monitor communicating with said first circuit board.</p>
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With this, claim 49 of the Adair '626 Patent defines a wireless telephone having each of the claimed elements of the instant claim 49 of the '369 Patent, hut therein failing to define the elements to be included within a PDA, as required in the instant '369 Patent.

In this regard, as discussed above, because claim 49 is written in *Jepson* format, such that claim 49 recites “In a PDA having capability to transmit data between a personal computer connected to a communications network, the improvement comprising. . .”, the features of “a PDA having capability to transmit data between a personal computer connected to a communications network” are seen to be admitted prior art of another. Therefore, it would have been obvious to a person of ordinary skill in the art to apply the admitted prior art known element of “a PDA having capability to transmit data between a personal computer connected to a communications network” to the elements of the wireless telephone defined in the Adair ‘626 Patent’s claim 49.

With this, substituting a PDA for a wireless telephone, as claim 49 of the ‘369 Patent does, with respect to the Adair ‘626 Patent, the claimed elements appear to be a mere substitution of one element for another known in the field. Therefore, one of ordinary skill in the art would find that substituting a PDA instead of a wireless video telephone would be obvious, as the admitted known elements of “a PDA having capability to transmit data between a personal computer connected to a communications network” to the elements of the wireless telephone defined in the ‘626 Patent’s claim 49. Here, “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* at 415-16, 82 USPQ2d at 1395.

The suggestion/motivation for doing so would have been that the invention defined in claim 49 of the

Adair '626 Patent would become more versatile, as the claimed apparatus can be utilized as a PDA, being a "popular item" to those of ordinary skill in the art, whereby as recognized by the '369 Patent itself, in col. 3, lines 36-46, the '369 Patent states "Recently, devices known as palm top computers, PDA(s), or hand-held computers have become very popular items. Essentially, these PDAs are miniature computer, small enough to be held in the hand, which have various software programs available to a user . . ." One skilled in the art would understand that the invention in patented claim 49 of the Adair '626 Patent can easily be modified to be within a PDA, and would yield predictable results. Therefore, it would have been obvious to combine the admitted prior art of a PDA with the invention defined in claim 49 of the Adair '626 Patent to obtain the invention as specified in claim 49 of the '369 Patent.

22. A claim chart below illustrates the similarities of claim 55 of the '369 Patent and claim 55 of the Adair '626 Patent.

Claim 55 of the '369 Patent:	The Adair '626 Patent claim 55:
55. In <u>a PDA</u> having capability to transmit data between a personal computer connected to a communications network, <u>the PDA</u> including a video view screen for viewing video images, the improvement comprising:	55. In <u>a video telephone</u> for receiving and transmitting telephone communications to include video signals transmitted by the user of the phone, and video signals received from a party to whom a call is made, the video telephone including a video monitor for viewing the

<p>a camera module for taking video images, said camera module communicating with circuitry within <u>said PDA</u> enabling viewing on said video view screen and enabling video signals to be transmitted from said camera module to the personal computer,</p> <p>said camera module including an image sensor housed therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon, said image sensor producing a pre-video signal, a first circuit board lying in a second plane and electrically connected to said image sensor,</p> <p>said first circuit board including circuitry means for timing and control of said array of CMOS pixels and circuitry means for processing and converting said pre-video signal to a desired video format.</p>	<p>video signals, the improvement comprising:</p> <p>a camera module for taking video images, said camera module communicating with circuitry within <u>said video telephone</u> enabling viewing on <u>said video telephone</u> and enabling video signals to be transmitted from said camera module by said party for viewing,</p> <p>said camera module including an image sensor housed therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon, said image sensor producing a pre-video signal, a first circuit board lying in a second plane and electrically connected to said image sensor,</p> <p>said first circuit board including circuitry means for timing and control of said array of CMOS pixels and circuitry means for processing and converting said pre-video signal to a desired video format.</p>
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With this, claim 55 of the Adair '626 Patent defines a video telephone having each of the claimed elements of the instant claim 55 of the '369 Patent, but therein failing to define the elements to be included within a PDA, as required in the instant '369 Patent.

In this regard, as discussed above, because claim 55 of the '369 Patent is written in *Jepson* format, such that claim 55 recites "In a PDA having capability to transmit data between a computer connected to a communications network, the PDA including a video view screen for viewing video images, the improvement comprising . . .", the features of "a PDA having capability to transmit data between a computer connected to a communications network, the PDA including a video view screen for viewing video images" are seen to be admitted prior art of another. Therefore, it would have been obvious to a person of ordinary skill in the art to apply the admitted prior art known element of "a PDA having capability to transmit data between a computer connected to a communications network, the PDA including a video view screen for viewing video images" to the elements of the video telephone defined in the '626 Patent's claim 55.

With this, substituting a PDA for a wireless telephone, as claim 55 of the '369 Patent does, with respect to the Adair '626 Patent, the claimed elements appear to be a mere substitution of one element for another known in the field. Therefore, one of ordinary skill in the art would find that substituting a PDA instead of a video telephone would be obvious, as the admitted known elements of "a PDA having capability to transmit data between a computer connected to a

communications network, the PDA including a video view screen for viewing video images” to the elements of the video telephone defined in the ‘626 Patent’s claim 55. Here, “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* at 415-16, 82 USPQ2d at 1395.

The suggestion/motivation for doing so would have been that the invention defined in claim 55 of the Adair ‘626 Patent would become more versatile, as the claimed apparatus can be utilized as a PDA, being a “popular item” to those of ordinary skill in the art, whereby as recognized by the ‘369 Patent itself, in col. 3, lines 36-46, the ‘369 Patent states “Recently, devices known as palm top computers, PDA(s), or hand-held computers have become very popular items. Essentially, these PDAs are miniature computer, small enough to be held in the hand, which have various software programs available to a user . . .” One skilled in the art would understand that the invention in patented claim 55 of the Adair ‘626 Patent can easily be modified to be within a PDA, and would yield predictable results. Therefore, it would have been obvious to combine the admitted prior art of a PDA with the invention defined in claim 55 of the Adair ‘626 Patent to obtain the invention as specified in claim 55 of the ‘369 Patent.

23. A claim chart below illustrates the similarities of claim 61 of the ‘369 Patent and claim 61 of the Adair ‘626 Patent.

Claim 61 of the ‘369 Patent:	The Adair ‘626 Patent claim 61:
61. A <u>PDA</u> having capability for receiving and	61. A <u>video telephone</u> for conducting telephonic

<p>transmitting video and audio images between the PDA and a personal computer connected to a communications network, said PDA comprising:</p> <p>an image sensor lying in a first plane including an array of CMOS pixels for receiving images thereon, said image sensor producing a pre-video signal;</p> <p>a first circuit board electrically communicating with said image sensor and separated from said image sensor, said first circuit board including circuitry means for timing and control of said array of CMOS pixels and circuitry means for processing and converting said pre-video signal to a desired video format;</p> <p>a camera module housing said image sensor;</p> <p>a transceiver/amplifier section electrically coupled to said first circuit board for transmitting, receiving, and amplifying video and audio signals;</p> <p>a digital signal processor electrically</p>	<p>communications including receiving and transmitting video images between two parties of a telephone call, said video telephone comprising:</p> <p>an image sensor lying in a first plane including an array of CMOS pixels for receiving images thereon, said image sensor producing a pre-video signal;</p> <p>a first circuit board lying in a second plane electrically communicating with said image sensor, said first circuit board including circuitry means for timing and control of said array of CMOS pixels and circuitry means for processing and converting said pre-video signal to a desired video format;</p> <p>a camera module housing said image sensor;</p> <p>a transceiver/amplifier section electrically coupled to said first circuit board for transmitting, receiving, and amplifying video and audio signals;</p> <p>a digital signal processor electrically</p>
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<p>coupled to said first circuit board and said transceiver/amplifier section, said digital signal processor further conditioning said pre-video signal which is first conditioned by said first circuit board, and also for conditioning video and audio signals from said transceiver/amplifier section;</p> <p>a microphone electrically communicating with said digital signal processor for recording and receiving audio signals;</p> <p>a speaker electrically communicating with said digital signal processor for broadcasting audio signals;</p> <p>a video view screen attached to said PDA, said video view screen for selectively displaying images from said imaging device, and for selectively displaying video images received by said transceiver/amplifier section;</p> <p>a video switch communicating with said first circuit board and said digital signal processor for</p>	<p>coupled to said first circuit board and said transceiver/amplifier section, said digital signal processor further conditioning said pre-video signal which is first conditioned by said first circuit board, and also for conditioning video and au[d]io signals from said transceiver/amplifier section;</p> <p>a microphone electrically communicating with said digital signal processor for receiving audio signals;</p> <p>a speaker electrically communicating with said digital signal processor for broadcasting audio signals;</p> <p>a video monitor attached to said video phone, said video monitor for selectively displaying images from said imaging device, and for selectively displaying video images received by said transceiver/amplifier section;</p> <p>a video switch communicating with said first circuit board and said digital signal processor for</p>
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switching video images to be viewed on said video view screen; and a power supply mounted to <u>said PDA</u> for providing power thereto.	switching video images to be viewed on said video monitor; and a power supply mounted to <u>said video telephone</u> for providing power thereto.
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With this, claim 61 of the Adair '626 Patent defines a video telephone having each of the claimed elements of the instant claim 61 of the '369 Patent, but therein failing to define the elements to be included within a PDA, as required in the instant '369 Patent.

But as noted above, the various claims of the '369 Patent are written in *Jepson* format, such that the claims admit that at least a "PDA having capability to transmit data between a personal computer connected to a communications network" was a known element, being seen as admitted prior art of another. Therefore, it would have been obvious to a person of ordinary skill in the art to apply the admitted prior art known element of "a PDA having capability to transmit data between a computer connected to a communications network" to the elements of the video telephone defined in the '626 Patent's claim 61.

With this, substituting a PDA for a wireless telephone, as claim 61 of the '369 Patent does, with respect to claim 61 of the Adair '626 Patent, the claimed elements appear to be a mere substitution of one element for another known in the field. Therefore, one of ordinary skill in the art would find that substituting a PDA instead of a video telephone would be obvious, as the admitted known elements of "a PDA

having capability to transmit data between a computer connected to a communications network” to the elements of the video telephone defined in the ‘626 Patent’s claim 61. Here, “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* at 415-16, 82 USPQ2d at 1395.

The suggestion/motivation for doing so would have been that the invention defined in claim 61 of the Adair ‘626 Patent would become more versatile, as the claimed apparatus can be utilized as a PDA, being a “popular item” to those of ordinary skill in the art, whereby as recognized by the ‘369 Patent itself, in col. 3, lines 36-46, the ‘369 Patent states “Recently, devices known as palm top computers, PDA(s), or hand-held computers have become very popular items. Essentially, these PDAs are miniature computer, small enough to be held in the hand, which have various software programs available to a user . . .” One skilled in the art would understand that the invention in patented claim 61 of the Adair ‘626 Patent can easily be modified to be within a PDA, and would yield predictable results. Therefore, it would have been obvious to combine the admitted prior art of a PDA with the invention defined in claim 61 of the Adair ‘626 Patent to obtain the invention as specified in claim 61 of the ‘369 Patent.

Response to Arguments

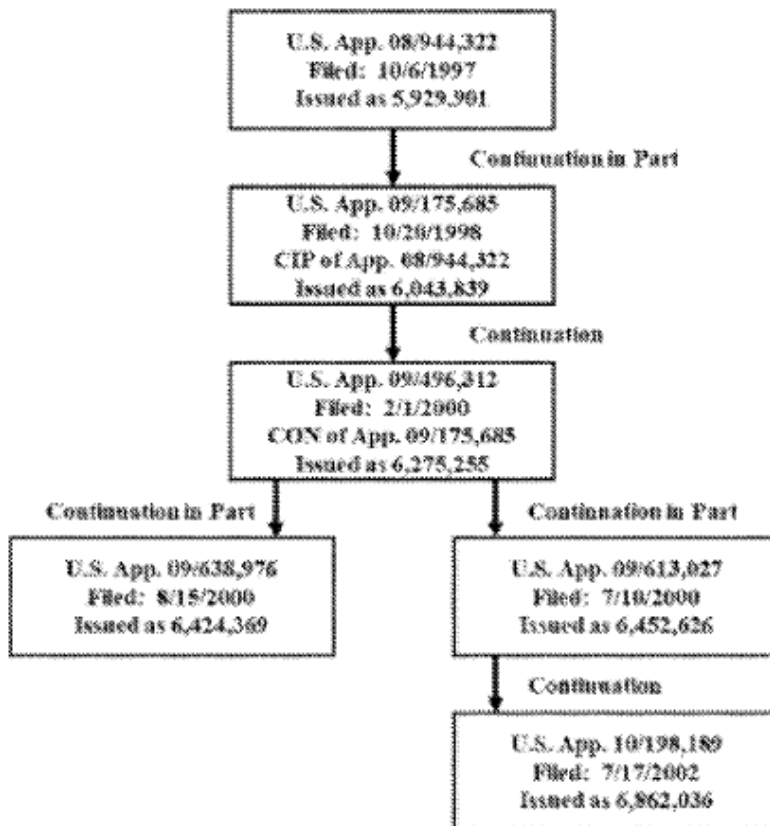
24. Applicant’s arguments filed October 13, 2020 have been fully considered but they are not persuasive.

25. As noted above, **claims 1, 17, 19, 21, 22, 27, 49, 55, and 61** of the instant ‘369 Patent stand rejected on the ground of nonstatutory double patenting as being

unpatentable over claims 1, 17, 19, 21, 22, 27, 33, 33, and 33, respectively, of U.S. Patent 6,862,036, issued to Adair *et al.* (noted as “the ‘036 Patent”) in view of admitted prior art and/or U.S. Patent 6,202,060, issued to Tran (hereafter “Tran”). Additionally, claims **1, 17, 19, 21, 22, 27, 49, 55, and 61** of the instant ‘369 Patent stand rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1, 17, 19, 21, 22, 27, 49, 55, and 61, respectively, of U.S. Patent 6,452,626, issued to Adair *et al.* (noted as “the ‘626 Patent”) in view of admitted prior art.

26. With this, beginning on page 5 of the arguments dated October 13, 2020, the Patent Owner argues in “Section A”, that the difference in expiration dates between the ‘369 Patent, ‘036 Patent and ‘626 Patent is solely due to patent term adjustment authorized by U.S.C. § 154. Particularly, the Patent Owner argues on page 5 that “As a result, and because the ‘369 and ‘036 patents claimed the same priority to the ‘901 Patent (October 7, 1997), the ‘369 Patent expired 45 days after the ‘036 Patent and 14 days before the ‘626 Patent expired due to the PTA awarded by the Patent Office pursuant to 35 U.S.C. § 154.”

27. However, this analysis presented by the Patent Owner is flawed. In this regard, as discussed in the prior Office action (as well as in the Request for Reexamination dated February 17, 2020), the priority chain in the patent family is reproduced below:



28. Along this vein, while the '369 Patent and the '036 Patent share portions of the same priority chain, going back to the application that matured into the '901 Patent, the applications that matured into the '369 Patent and the '036 Patent were both filed as continuation-in-parts to the U.S. Application 09/496,312 (which matured into U.S. Pat. 6,275,255). Thus, with respect to the instant features in claims 1, 17, 19, 21-22, 27, 49, 55, and 61 of the '369 Patent, which are subject of the instant reexamination proceeding, with the claimed functionality being included "in a personal digital assistant (PDA)", the earliest effective priority date for this specific feature

appears to be August 15, 2000, being the filing date of the application that matured into the '369 Patent. Here, the specification of the '369 Patent is seen to describe embodiments of the invention being included within a personal digital assistant. *See, for example, the Abstract, Figs. 2, 3, 6a, and 6b, and col. 4, lines 30-63 of the '369 Patent.* This description of embodiments being incorporated into a personal digital assistant, as discussed in the specification of the instant '369 Patent, is not seen to be sufficiently described in any of the previous applications in the chain of priority, which matured into U.S. Pat. 6,275,255, U.S. Pat. 6,043,839, and U.S. Pat. 5,929,901.

29. Therefore, the earliest priority date for features of claims 1, 17, 19, 21-22, 27, 49, 55, and 61 of the '369 Patent that are subject to reexamination is not seen to have the same priority date as that of the cited claims in the '036 Patent or the '626 Patent, which claimed features both appear to have the effective filing date of July 10, 2000, being the filing date of the application that matured into the '626 Patent.

30. Thus, with this analysis, contrary to the Patent Owner's arguments, the difference in expiration dates between the claims of the '369 Patent, and the claims of the '036 Patent and the '626 Patent are not solely due to patent term adjustments authorized by 35 U.S.C. § 154. Rather, as shown above, it appears that the claims at issue of the instant '369 Patent have a later effective filing date (August 15, 2000) than that of either of the '036 Patent or the '626 Patent (July 10, 2000), and thus the difference in expiration dates is not based solely on patent term adjustments authorized by 35 U.S.C. § 154.

31. The Examiner further notes that upon review of the original prosecution of the application that matured into the instant '369 Patent, it appears that the original examiner utilized the date of August 15, 2000 as the effective filing date, as numerous pieces of prior art were cited that have effective filing dates being before the filing date of August 15, 2000, but which are later than the date suggested by the Patent Owner of October 6, 1997 (being the filing date of U.S. App. 08/944,322). For instance, the original examiner rejected claims utilizing the reference of Drotter *et al.* (U.S. Pat. 6,147,366), which was filed February 8, 1999, the reference of Upton *et al.* (U.S. Pat. 6,141,037), which was filed March 18, 1998, and the reference of Allport (U.S. Pat. 6,104,334), which was filed December 31, 1997. In response to the rejection, in the original prosecution, the Applicant did not argue that these references were not prior art by virtue of an earlier priority date, but rather amended the claims accordingly. Thus, the record is clear that the effective filing date for the '369 Patent is August 15, 2000, being the filing date of the application that matured into the '369 Patent.

32. Continuing, on page 6, the Patent Owner illustrates a timeline of the '369 Patent, the '036 Patent, and the '626 Patent, which is copied below.

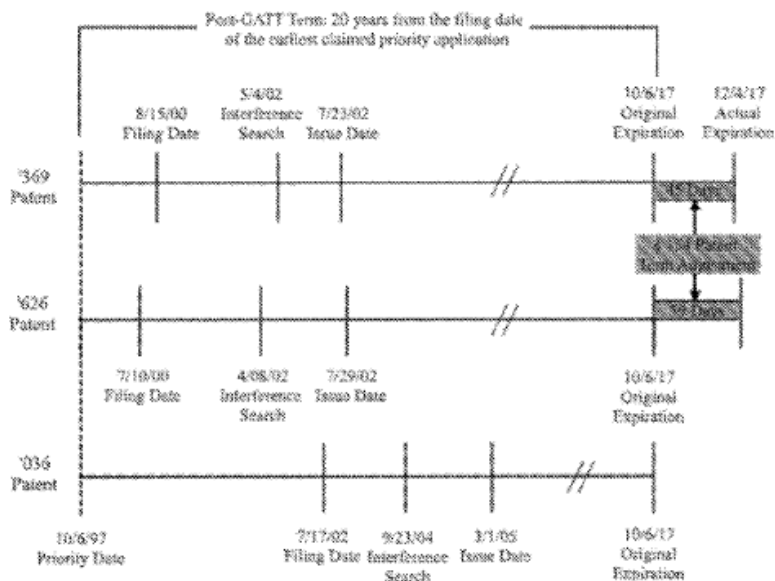


Fig. 1: '369, '036, '626 Timeline

33. However, this illustration provided by the Patent Owner is not seen to be accurate, as the effective filing date of the '369 Patent is seen to be August 15, 2000, being filed as a continuation-in-part of an earlier application. Further, the effective filing dates for both the '626 Patent and the '036 Patent are seen to be the filing date of the '626 Patent, that being July 10, 2000, also being filed as a continuation-in-part of an earlier application. Thus, the chain of priority in these patent applications was broken, as the claimed features are not taught in the earlier applications. Using these effective filing dates for the patents at issue, the illustrated timeline by the Patent Owner is seen to be inaccurate.

34. Continuing, the Patent Owner further argues on pages 6 and 7 of the arguments dated October 13, 2020 that because the original examiner performed interference searches within the original examinations of the applications that matured into the patents cited herein, the Patent Owner posits that “No obviousness-type double patenting rejection was issued against the ‘626 Patent or the ‘369 Patent, as would have been issued pursuant to standard Patent Office procedures if Examiner Rao believed that such a rejection was warranted.”

35. But here, just because interference searches were conducted by the original examiner in the prosecution of the applications that matured into the ‘369 Patent and the ‘626 Patent, there is no evidence that the original examiner considered the double patenting issues set forth in the this reexamination proceeding when the original application that matured into the ‘369 Patent was being prosecuted.

36. In this regard, MPEP 804 (I)(E), states

A double patenting issue may raise a substantial new question of patentability of a claim of a patent, and thus can be addressed in a reexamination proceeding. *In re Lonardo*, 119 F.3d 960, 966, 43 USPQ2d 1262, 1266 (Fed. Cir. 1997) (In giving the Director authority under 35 U.S.C. 303(a) in determining the presence of a substantial new question of patentability, “Congress intended that the phrases ‘patents and publications’ and ‘other patents or publications’ in section 303(a) not be limited to *prior art* patents or printed publications.”) (emphasis added). Accordingly, **if the same issue of double patenting was not addressed during original**

prosecution, it may be considered during reexamination.

37. With this, during the original prosecution of the ‘369 Patent, no obviousness-type double patenting was raised or addressed. Here, the ‘626 Patent and the ‘036 Patent, which are cited in the respective obviousness-type double patenting rejections, are being presented in a new light than was previously considered in the original prosecution. Therefore, obviousness-type double patenting is deemed to be proper in this reexamination proceeding.

38. Continuing, beginning on page 7 of the arguments submitted October 13, 2020, in “Section B”, the Patent Owner argues that “The ‘369 Patent cannot be the subject of obviousness-type double patenting over the ‘036 Patent solely based on PTA changing expiration dated of the patents.” With this, the Patent Owner discusses the Federal Circuit’s decision *Novartis AG v. Ezra Ventures LLC*, 909 F.3d 1367, 1373-75 (Fed. Cir. 2018). Here, on pages 7 and 8 of the instant arguments, the Patent Owner argues “Novartis affirmed a ruling by the District of Delaware that obviousness-type double patenting did not invalidate a patent whose term was extended via a patent term extension granted pursuant to 35 U.S.C. § 156(c)(4). As framed by the Federal Circuit, ‘a judge-made doctrine [obviousness-type double patenting]’ does not ‘cut off a statutorily authorized time extension’ and that finding otherwise was something that the Federal Circuit would ‘decline to do. . .’”.

39. However, in response, it is noted that the *Novartis* decision revolves around a patent term extension under 35 U.S.C. § 156, which is different

than instant patent term adjustments under 35 U.S.C. § 154(b) for the '369 Patent under reexamination, as well as the cited art in obviousness-type double patenting rejections. In this regard, the Federal Circuit's decision regarding patent term extensions is not seen to directly apply to patent term adjustments because of delays in the Office. Along this vein, there is no patent term extension under 35 U.S.C. § 156 involved in the instant '369 Patent, the '626 Patent, or the '036 Patent.

40. Further, the *Novartis* court expressly stated:

We then noted the contrast between § 156 for PTE with the language of § 154 for patent term adjustments: § 154 “expressly excludes patents in which a terminal disclaimer was filed from the benefit of a term adjustment for PTO delays,” but § 156 contains “no similar provision that excludes patents in which a terminal disclaimer was filed from the benefits of Hatch-Waxman extensions.” *Id.* at 1322.

See Novartis, 909 F. 3d 1374.

41. With this, the treatments of obviousness-type double patenting rejections with a patent having a patent term extension and obviousness-type double patenting rejections with a patent having a patent term adjustment are recognized to be distinct from each other, as the statutes are different, as recognized by the Court. Thus, *Novartis* would not be seen to necessarily directly apply, nor control the instant obviousness-type double patenting rejections, which are patents that have a patent term adjustments under 35 U.S.C. § 154, with none of the '369 Patent,

the '626 Patent, or the '036 Patent having a patent term extension under 35 U.S.C. § 156.

42. Continuing, on page 8 of the arguments dated October 13, 2020, in discussing *Novartis*, the Patent Owner argues “Applying obviousness-type double patenting to invalidate a patent over a related patent having the same priority claim, but a different expiration date arising solely based on a statutorily-authorized patent term adjustments, would elevate the judicially created double patenting doctrine over the statutory grant of PTA – exactly what the Federal Circuit said is improper in *Novartis*.” But as discussed above, the effective filing date of the instant '369 Patent and the effective filing date of the '036 Patent and the '626 Patent are both different. Again the applications that matured into the instant '369 Patent, as well as the applications of the '036 Patent and the '626 Patent were filed as a continuation-in-parts to the U.S. Application 09/496,312, therein breaking the chain in priority. Here, the claimed features of the '369 Patent were described in the specification of the '369 Patent, and are seen to have an effective filing date of August 15, 2000, while the effective filing date of the '036 Patent and the '626 Patent are seen to be July 10, 2000. Thus, the Patent Owner’s logic is flawed, as the patents at issue do not have “the same priority claim, but a different expiration date arising solely based on a statutorily-authorized patent term adjustments”.

43. Continuing, on page 9, the Patent Owner argues “Analyzing the facts before it in *Novartis*, the Federal Circuit noted several points pertinent here. First, *Novartis* involved an earlier filed application that had a later expiration date due solely to a

statutorily authorized change in patent term.” But here, looking at the filing date of the ‘626 Patent, which is cited in a obviousness-type double patenting rejection, the application that matured into the ‘626 Patent was filed on July 10, 2000, being before the filing date of the instant application that matured into the ‘369 Patent, being August 15, 2000. Thus, this reference is not equivalent to the arguments discussed in *Novartis*. Additionally, the Examiner notes that the ‘036 Patent was filed on July 17, 2002, which is after the instant the filing date of the application that became the ‘369 Patent. However, the ‘036 Patent was filed as a continuation of the application that matured into the ‘626 Patent, which as noted above, had the filing date of July 10, 2000. Thus, the effective filing date of both the ‘626 Patent and the ‘036 Patent are seen to be July 10, 2000, which is before the effective filing date of the instant ‘369 Patent. Therefore, the facts in the instant case are not equivalent to that as discussed by the Court in *Novartis*.

44. Continuing, on page 11 of the arguments dated October 13, 2020, the Patent Owner argues that “The cases cited in the Request and Office action are inapposite and are not controlling”. Here, the Patent Owner argues that the Request set forth an erroneous explanation of the legal standards for ordering reexamination based on double patenting, relied on several inapposite cases, and omitted the most pertinent and recent decision from the federal circuit in *Novartis*. In this regard, the Patent Owner argues “As noted above, the Request for Ex Parte Reexamination set forth an erroneous explanation of the legal standards for ordering reexamination based on double patenting, relied on several inapposite cases, and omitted the most pertinent and recent

decision from the Federal Circuit in Novartis. More particularly, the cases cited in the Office Action all relate to an obviousness-type double patenting analysis involving pre-GATT patents.”

45. However, upon review of the prosecution history of the instant reexam proceeding, there is not seen to be any erroneous explanation of the legal standards for ordering reexamination based on double patenting. Particularly, MPEP 2258(I) states, in part:

Typically, substantial new questions of patentability and rejections in a reexamination proceeding are based on “prior art” patents and publications. However, there are exceptions, even for reexaminations ordered under 35 U.S.C. 304. For example, in *In re Lonardo*, 119 F.3d 960, 43 USPQ2d 1262 (Fed. Cir. 1997), the Federal Circuit upheld a nonstatutory double patenting rejection in which the patent upon which the rejection was based and the patent under reexamination shared the same effective filing date.

46. Additionally, MPEP 2258(I)(D) states, in part:

Double patenting is normally proper for consideration in reexamination under 35 U.S.C. 302. See *In re Lonardo*, 119 F.3d 960, 43 USPQ2d 1262 (Fed. Cir. 1997). In *Lonardo*, the Federal Circuit reviewed and interpreted the language of 35 U.S.C. 303 and stated that:

Since the statute in other places refers to prior art in relation to reexamination, *see id.*, it seems apparent that Congress intended that the phrases ‘patents and publications’ and ‘other patents or printed publications’ in

section 303(a) not be limited to prior art patents or printed publications. . . . Finally, it is reasonable to conclude that Congress intended to include double patenting over a prior patent as a basis for reexamination because maintenance of a patent that creates double patenting is as much of an imposition on the public as maintenance of patent that is unpatentable over prior art. Thus, we conclude that the PTO was authorized during reexamination to consider the question of double patenting based upon the '762 patent.

In re Lonardo, 119 F.3d at 966, 43 USPQ2d at 1266. Accordingly, the issue of double patenting, over prior art patents or non-prior art patents, is appropriate for consideration in reexamination under 35 U.S.C. 302, both as a basis for ordering reexamination under 35 U.S.C. 304 and during subsequent examination on the merits. The issue of double patenting is to be considered by the examiner when making the decision on the request for reexamination. **The examiner should determine whether the issue of double patenting raises a substantial new question of patentability. The issue of double patenting is also to be considered during the examination stage of reexamination proceeding. In the examination stage, the examiner should determine whether a rejection based on double patenting is appropriate.**

47. With this, whether the patents in question are pre-GATT or post-GATT, the double patenting issue is appropriate to consider in a reexamination proceeding, and the discussed Court decisions, such as *In re Lonardo*, are applicable and controlling. Along

this vein, in this reexamination proceeding, the Examiner determined that the issue of double patenting described in the Request raised a substantial new question of patentability, and that a rejection of **claims 1, 17, 19, 21, 22, 27, 49, 55, and 61** of the instant '369 Patent was appropriate to be rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1, 17, 19, 21, 22, 27, 33, 33, and 33, respectively, of the '036 Patent in view of admitted prior art and/or U.S. Patent 6,202,060, issued to Tran (hereafter "Tran"). Additionally, in this reexamination proceeding, the Examiner also determined that a rejection of **claims 1, 17, 19, 21, 22, 27, 49, 55, and 61** of the instant '369 Patent was also appropriate to be rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1, 17, 19, 21, 22, 27, 49, 55, and 61, respectively, of the '626 Patent in view of admitted prior art.

48. Continuing, on page 14 of the arguments dated October 13, 2020, the Patent Owner argues that "In contrast to *AbbVie* and *Gilead*, this *ex parte* reexamination does not involve patents that have different priority claims, nor is there any basis in the file histories of the '369 Patent to suggest any improper intent to seek additional patent term by filing sequential applications. In fact, the '369 and the '036 Patent both make the same priority claim back to October 6, 1997." However, as discussed above, this analysis by the Patent Owner is flawed. Particularly, as noted above, the effective filing date of the '369 Patent is seen to be August 15, 2000, being filed as a continuation-in-part of an earlier application. Further, the effective filing dates for both the '626 Patent and the '036 Patent, which are both utilized in

separate obviousness-type double patenting rejections, are seen to be July 10, 2000, being the filing date of the '626 Patent, which was also filed as a continuation-in-part of an earlier application. Thus, the chain of priority in these patent applications was broken, as the claimed features in the applications filed as continuations-as-part describe and claim subject matter that was not taught in the earlier applications going back to October 6, 1997, as argued by the Patent Owner. With this, for the subject matter at issue, the '369 Patent and the '036 Patent, as well as the '626 Patent, would not have the same priority dates, claiming back to October 6, 1997, as argued.

49. Continuing, on page 15 of the arguments dated October 13, 2020, the Patent Owner argues that the instant patent and the cited art in the obviousness double patenting rejections “do not give rise to harassment from multiple assignees as the patents have been commonly owned since issuance.” Specifically, the Patent Owner argues on page 15 that “Since the '369, '036, '626 and related patents are all owned by either MIS or Collect, is wholly owned subsidiary, the Patents are in common ownership; thus, there is no risk to the public of harassment from multiple assignees attempting to enforce the same rights”. Here, the Patent Owner argues that an obviousness double patenting rejection is not proper because there is no need to prevent possible harassment by multiple assignees.

50. However, the Examiner notes that nonstatutory double patenting is intended to prevent “the unjustified extension of patent exclusivity beyond the term of a patent.” See MPEP 804. In this regard, MPEP 804 further states, in part:

Before consideration can be given to the issue of double patenting, **two or more patents or applications must have at least one common inventor, common applicant, and/or be commonly assigned/owned** or non-commonly assigned/owned but subject to a joint research agreement as set forth in 35 U.S.C. 102(c) or in pre-AIA 35 U.S.C. 103(c)(2) and (3). For purposes of a double patenting analysis, the application or patent and the subject matter disqualified under 35 U.S.C. 102(b)(2)(C) or pre-AIA 35 U.S.C. 103(c) will be treated as if commonly owned. See MPEP § 804.03. Since the doctrine of double patenting seeks to avoid unjustly extending patent rights at the expense of the public, the focus of any double patenting analysis necessarily is on the claims in the multiple patents or patent applications involved in the analysis.

...

The doctrine of nonstatutory double patenting also seeks to prevent the possibility of multiple suits against an accused infringer by different assignees of patents claiming patentably indistinct variations of the same invention. *In re Van Ornum*, 686 F.2d 937, 944-48, 214 USPQ 761, 767-70 (CCPA 1982). **The submission of a terminal disclaimer in compliance with 37 CFR 1.321(c) or (d) to overcome a double patenting rejection ensures that a patent owner with multiple patents claiming obvious variations of one invention retains all those patents or sells them as a group.** *Van Ornum*, 686 F.2d at 944-45, 214 USPQ at 767.

51. Here, once again, a timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or

1.321(d) may be used to overcome an actual or provisional rejection based on nonstatutory double patenting provided the reference application or patent either is shown to be commonly owned with the examined application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. See MPEP § 717.02 for applications subject to examination under the first inventor to file provisions of the AIA as explained in MPEP § 2159. See MPEP §§ 706.02(1)(1) - 706.02(1)(3) for applications not subject to examination under the first inventor to file provisions of the AIA. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

52. Therefore, for the reasons discussed above, the nonstatutory grounds of obviousness-type double patenting rejections are deemed to be proper. Thus, the rejection of **claims 1, 17, 19, 21, 22, 27, 49, 55, and 61** of the instant '369 Patent on the ground of nonstatutory double patenting as being unpatentable over claims 1, 17, 19, 21, 22, 27, 33, 33, and 33, respectively, of the '036 Patent in view of admitted prior art and/or Tran, is deemed proper, and is herein repeated. Additionally, the rejection of **claims 1, 17, 19, 21, 22, 27, 49, 55, and 61** of the instant '369 Patent on the ground of nonstatutory double patenting as being unpatentable over claims 1, 17, 19, 21, 22, 27, 49, 55, and 61, respectively, of the '626 Patent in view of admitted prior art, is deemed proper, and is herein repeated.

Conclusion

53. **THIS ACTION IS MADE FINAL.**

A shortened statutory period for response to this action is set to expire TWO MONTHS from the mailing date of this action.

Extensions of time under 37 CFR 1.136(a) do not apply in reexamination proceedings. The provisions of 37 CFR 1.136 apply only to “an applicant” and not to parties in a reexamination proceeding. Further, in 35 U.S.C. 305 and in 37 CFR 1.550(a), it is required that reexamination proceedings “will be conducted with special dispatch within the Office.”

Extensions of time in reexamination proceedings are provided for in 37 CFR 1.550(c). A request for extension of time must specify the requested period of extension and it must be accompanied by the petition fee set forth in 37 CFR 1.17(g). Any request for an extension in a third party requested ex parte reexamination must be filed on or before the day on which action by the patent owner is due, and the mere filing of a request will not effect any extension of time. A request for an extension of time in a third party requested ex parte reexamination will be granted only for sufficient cause, and for a reasonable time specified. Any request for extension in a patent owner requested ex parte reexamination (including reexamination ordered under 35 U.S.C. 257) for up to two months from the time period set in the Office action must be filed no later than two months from the expiration of the time period set in the Office action. A request for an extension in a patent owner requested ex parte reexamination for more than two months from the time period set in the Office action must be filed on or before the day on which action by the patent owner is due, and the mere filing of a request for an extension for more than two

months will not effect the extension. The time for taking action in a patent owner requested *ex parte* reexamination will not be extended for more than two months from the time period set in the Office action in the absence of sufficient cause or for more than a reasonable time.

The filing of a timely first response to this final rejection will be construed as including a request to extend the shortened statutory period for an additional two months. In no event, however, will the statutory period for response expire later than SIX MONTHS from the mailing date of the final action. See MPEP § 2265.

54. The Patent Owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving U.S. Patent No. 6,424,369 throughout the course of this reexamination proceeding

55. ALL correspondence relating to this *ex parte* reexamination proceeding should be directed as follows:

Please mail any communications to:

Attn: Mail Stop "Ex Parte Reexam"
Central Reexamination Unit
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

Please FAX any communications to:

(571)273-9900
Central Reexamination Unit

240a

Please hand-deliver any communications to:

Customer Service Window
Attn: Central Reexamination Unit
Randolph Building, Lobby Level
401 Dulany Street
Alexandria, VA 22314

Registered users of EFS-Web may alternatively submit such correspondence via the electronic filing system EFS -Web, at:

<https://efs.uspto.gov/efile/myportal/efs-registered>

EFS-Web offers the benefit of quick submission to the particular area of the Office that needs to act on the correspondence. Also, EFS-Web submissions are “soft scanned” (i.e., electronically uploaded; directly into the official file for the reexamination proceeding, which offers parties the opportunity to review the content of their submissions after the “soft scanning” process is complete.

Any inquiry concerning this communication or earlier communications from the Reexamination Legal Advisor or Examiner, or as to the status of this proceeding, should be directed to the Central Reexamination Unit at telephone number (571) 272-7705.

Signed:

/JOSEPH R POKRZYWA/
Primary Examiner, Art Unit 3992
(571)272-7410

Conferees:

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241a

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Supervisory Patent Examiner, Art Unit 3992

APPENDIX H

Reexamination Control No. 90/014,455
Patent Under Reexamination: 6,452,626
Art Unit: 3992

Dated: Sept. 17, 2020

***EX PARTE* REEXAMINATION COMMUNICATION**

**EX PARTE REEXAMINATION
OF U.S. PATENT 8,351,538**

I. ACKNOWLEDGMENTS

On Feb. 18, 2020, Third Party Requester (“**Requester**”) filed a request (“**Request**”) for *ex parte* reexamination of claims 1, 5, 11, 33, 34, 58, and 64 of US Patent 6,452,626 (“**the 626 Patent**”) which issued to Adair et al with title “COMMUNICATION DEVICES INCORPORATING REDUCED AREA IMAGING DEVICES.” The 626 Patent was filed on Jul. 10, 2000 with application number 09/613,027 (“**027 application**”) and issued on Sep. 17, 2002 with claims 1-74.

On Mar. 5, 2020, the Office mailed an order (“2020 Order”) granting reexamination of claims 1, 5, 11, 33, 34, 58, and 64 of the 626 Patent.

A Patent Owner’s statement in response to the 2020 Order has not been received.

On Jul. 7, 2020, the Office mail a non-final office action (“Jul 2020 Non-Final Office Action”).

On Aug. 6, 2020, a Patent-Owner requested interview was conducted.

On Sep. 8, 2020, Patent Owner filed a response (“**Sep 2020 Response**”) to the Jul 2020 Non-Final Office Action. The Sep 2020 Response contains, among other things, “Response to Office Action” (“**Response**”), multiple declarations (Declaration by Spar, Declaration by Leby, Declaration by Adair), and many references. The Sep 2020 Response has been entered and considered in its entirety.

II. PRIORITY CLAIMS

This section is the same as that in the 2020 Order.

Based upon a review of the 626 Patent, the Examiner finds that the 626 Patent claims the following domestic priority:

This 027 application is a continuation-in-part of U.S. Ser. No. 09/496,312, filed Feb. 1, 2000, and entitled “Reduced Area Imaging Devices”, now US Patent 6,275,255, which is a continuation application of U.S. Ser. No. 09/175,685, filed Oct. 20, 1998 and entitled “Reduced Area Imaging Devices”, now U.S. Pat. No. 6,043,839, which is a continuation-in-part of U.S. Ser. No. 08/944,322, filed Oct. 6, 1997 and entitled “Reduced Area Imaging Devices Incorporated Within Surgical Instruments”, now U.S. Pat. No. 5,929,901.

The 027 application does not claim any foreign priority.

Because the effective filing date of the 626 Patent is not on or after March 16, 2013, the AIA First

Inventor to File (“AIA-FITF”) provisions does not apply and the earlier ‘First to Invent’ provisions apply.

By reviewing US Patent 5,929,901 (hereafter “the 901 Patent”), US Patent 6,043,839 (hereafter “the 839 Patent”), and US Patent 6,275,255 (hereafter “the 255 Patent”), the Examiner concludes that the 901 Patent, the 839 Patent and the 255 patent do not have sufficient support for claims 1, 5, 11, 33, 34, 58, and 64 of the 626 Patent because the 901 Patent, the 839 Patent and the 255 patent do not sufficiently disclose a wireless telephone as claimed in claims 1, 5, 11, 33, 34, 58, and 64 of the 626 Patent. Therefore claims 1, 5, 11, 33, 34, 58, and 64 of the 626 Patent do not obtain the priority date of the 901 Patent, the 839 Patent or that of the 255 patent. The effective filing date for claims 1, 5, 11, 33, 34, 58, and 64 of the 626 Patent is filing date of the 027 application, i.e., Jul. 10, 2000. See also Response to Arguments below.

III. PRIOR OR CONCURRENT PROCEEDINGS

This section is the same as that in the 2020 Order.

Based upon Examiner’s review of the 626 Patent itself: the Request, and its prosecution history, the Examiner finds that there are no prior or concurrent *ex parte* or supplemental reexaminations for the 626 Patent. However there are litigations as disclosed in pp. i-ii of the Request (Request, pp. i-ii), i.e., *Collect, LLC v. Samsung Electronics Co.*, Case No. 1:19-cv-00438 (D. Col.). The 626 Patent was the subject of the following district court litigation that was subsequently dismissed: *Collect, LLC v. HTC America, Inc.*, Case No. 1:13-cv-02604 (D. Col.). The 626 Patent is also subject to the copending *inter partes* review proceedings in IPR2020-00565, IPR2020-

00566, and IPR2020-00567, which were petitioned on the same date the instant *ex parte* reexamination request was filed.

IV. REFERENCES

A. WO 97/09813 to Nguyen (hereafter “Nguyen”), published on Mar. 13, 1997. Nguyen was not on applied nor cited during the original prosecution of the 027 application or the 626 Patent and therefore qualified as prior art under 102(e). Because Nguyen was not used in prior prosecution, Nguyen can be used to raise a SNQ or can be applied in a rejection in the instant prosecution.

B. U.S. Patent No. 6,424,369 to Adair et al. (hereafter “**the 369 Patent**”), filed on Aug. 15, 2000, which is a continuation-in-part of U.S. Ser. No. 09/496,312, filed Feb. 1, 2000, and entitled “Reduced Area Imaging Devices”, now US Patent 6,275,255, which is a continuation application of U.S. Ser. No. 09/175,685, filed Oct. 20, 1998 and entitled “Reduced Area Imaging Devices”, now U.S. Pat. No. 6,043,839, which is a continuation-in-part of U.S. Ser. No. 08/944,322, filed Oct. 6, 1997 and entitled “Reduced Area Imaging Devices Incorporated Within Surgical Instruments”, now U.S. Pat. No. 5,929,901. The 369 Patent has the same assignee as the 626 Patent.

C. U.S. Patent No. 6,018,670 to Degenhardt (hereafter “Degenhardt”), filed on January 13, 1997 and issued on January 25, 2000 and is prior art under 35 U.S.C. §102(e).

D. Applicant Admitted Prior Art, (hereafter “APA”), col. 3, lines 39-40, col. 8, lines 62-67 of the 626 Patent.

V. CLAIM INTERPRETATION

A. Lexicographic Definitions

After careful review of the original specification and unless expressly noted otherwise by the Examiner, the Examiner cannot locate any lexicographic definitions in the original specification with the required clarity, deliberateness, and precision. Because the Examiner cannot locate any lexicographic definitions in the original specification with the required clarity, deliberateness, and precision the Examiner concludes the Patent Owner is not their own lexicographer. See MPEP § 2111.01 IV. A.

B. Sources for the ‘Ordinary or Accustomed Meaning’ Under the *Phillips* Standard

For terms not lexicographically defined by Patent Owner, the Examiner hereby adopts the following interpretations under the *Phillips* standard. “In a reexamination proceeding involving claims of an expired patent, claim construction [is] pursuant to the principle set forth by the court in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005).” MPEP 2258 I. G.

In other words, the Examiner has provided the following interpretations simply as express *notice* of how she is interpreting particular terms under the *Phillips* standard. Additionally, these interpretations are only a guide to claim terminology since claim terms must be interpreted in context of the surrounding claim language and specification.¹ To

¹ While most interpretations are cited because these terms are found in the claims, the Examiner may have provided additional interpretations to help interpret words, phrases, or concepts

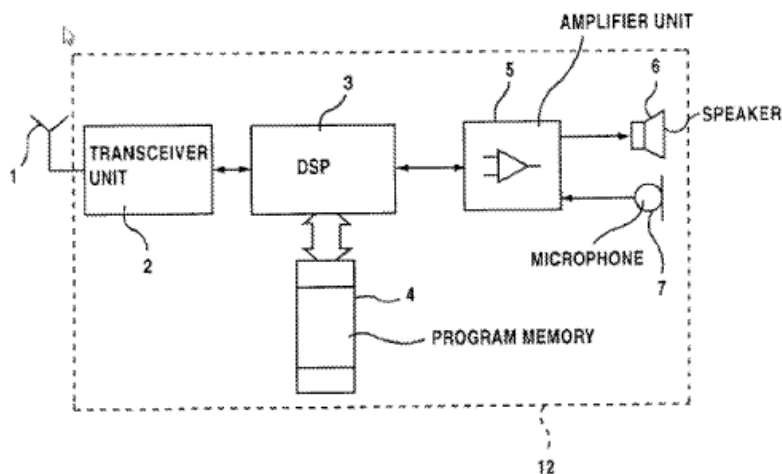
support the ordinary and accustomed meaning, the Examiner points to these other “sources” to support her interpretation of the claims. Finally, the following list is not intended to be exhaustive in any way:

1. **PDA:** 1) personal digital assistant such as a hand-held computer, col. 3, lines 39-41 of the 369 Patent. 2) a personal communication terminal that include a wireless telephone (Abstract of Nguyen, “*The PCT may be operated as a standard wireless telephone, as a personal computer, or in an integrated mode for FAX, wireless data transfer, or sending and receiving short message service (SMS) message.*”)

2. **Wireless telephone:** 1) a mobile phone as illustrated in Fig. 1 of US Patent 6,018,670 having at least an antenna, a transceiver unit, digital signal processor, memory, microphone and speakers; 2) a mobile phone including a camera module, the 626 Patent, col. 3, lines 39-41, “*Recently, there have been developments with providing camera capabilities for wireless/cellular phones.*”). 3) a personal communication terminal that includes a PDA and a mobile telephone unit (Abstract of Nguyen, “*The PCT may be operated as a standard wireless telephone, as a personal computer, or in an integrated mode for FAX, wireless data transfer, or sending and receiving short message service (SMS) message.*”).

found in the interpretations themselves, the 626 Patent, or in the prior art.

FIG.1



OFFICE ACTION FIGURE 1: Fig. 1 of U.S. Patent 6,018,670 or Degenhardt showing a mobile phone or a wireless phone.

VI. STATUS OF CLAIMS

Based on the Request and the 2020 Order:

Claims 1, 5, 11, 33, 34, 58, and 64 are being reexamined (“**Reexamined Claims**”).

Claims 2-4, 6-10, 12-32, 35-57, 59-63 and 65-74 are not being reexamined.

Regarding the Reexamined Claims and as a result of this Office action:

Claims 1, 5, 11, 33, 34, 58, and 64 are rejected.

VII. DOUBLE PATENTING REJECTION

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise

extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A. Claims 1, 5, 11, 33, 34, 58, and 64 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 14, 5, 11, 46, 34, 58, and 64 of the 369 Patent. Although the claims at issue are not identical, they are not patentably distinct from each other because

i. Claim 1 of the 626 Patent and claim 14 of the 369 Patent recite common subject matter; so are claims 5, 11, 33, 34, 58, and 64 and claims 5, 11, 46, 34, 58, and 64 of the 369 Patent respectively. See the tables below.

	The 626 Patent	The 369 Patent
preamble	1. In a wireless telephone for conducting wireless telephonic communications,	1. In a PDA having capability to transmit data between a personal computer connected

	the improvement comprising:	to a communications network, the improvement comprising:
Limitation 1	a video system integral with said telephone for receiving and transmitting video images, and for viewing said video images, said video system comprising;	a video system integral with said PDA for receiving and transmitting video images, and for viewing said video images, said video system comprising;
Limitation 1.1	a camera module housing an image sensor therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon, said image sensor further including circuitry means on said first plane and coupled to said array of CMOS pixels for timing and control of said array of CMOS pixels, said image sensor producing a pre-video signal, a first circuit board lying in a second plane and electrically	a camera module housing an image sensor therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon, said image sensor further including circuitry means on said first plane and coupled to said array of CMOS pixels for timing and control of said array of CMOS pixels, said image sensor producing a pre-video signal, a first circuit board lying in a second plane and electrically coupled to said image sensor,

	coupled to said image sensor, said first circuit board including circuitry means for converting said pre-video signal to a desired video format;	said first circuit board including circuitry means for converting said pre-video signal to a desired video format;
Limitation 1.2	a video monitor attached to said wireless phone for viewing said video images, said video monitor communicating with said first circuit board, and displaying video images processed by said first circuit board.	a video view screen attached to said PDA for viewing said video images, said video view screen communicating with said first circuit board, and displaying video images processed by said first circuit board.
		14. A device as claimed in claim 1, further including: a wireless telephone attached to said PDA.

-Table 1, claim 1 of the 626 Patent and claim 14 of the 369 Patent.

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	The 626 Patent	The 369 Patent
preamble	5. A device, as claimed in claim 1, further including:	5. A device, as claimed in claim 1, further including:
Limitation 5.1	a second circuit board electrically coupled with said first circuit board and said image sensor for further processing said pre-video signal, said second board being placed adjacent said first circuit board within said camera module.	a second circuit board electrically coupled with said first circuit board and said image sensor for further processing said pre-video signal, said second board being placed adjacent said first circuit board within said camera module.

-Table 2, claim 5 of the 626 Patent and claim 5 of the 369 Patent.

	The 626 Patent	The 369 Patent
preamble	11. A device, as claimed in claim 1,	11. A device, as claimed in claim 1,
Limitation 11.1	wherein: individual pixels within said array of CMOS pixels each include an amplifier.	wherein: individual pixels within said array of CMOS pixels each include an amplifier.

-Table 3, claim 11 of the 626 Patent and claim 11 of the 369 Patent.

	The 626 Patent	The 369 Patent
preamble	33. A video telephone for conducting telephonic communications including receiving and transmitting video images between two parties of a telephone call, said video telephone comprising:	33. A PDA having capability for receiving and transmitting video and audio images between the PDA and a personal computer connected to a communications network, said PDA comprising:
Limitation 33.1	an image sensor lying in a first plane, and an array of CMOS pixels for receiving images thereon, said image sensor further including circuitry means on said first plane and coupled to said array of CMOS pixels for timing and control of said array CMOS pixels, said image sensor producing a pre-video signal;	an image sensor lying in a first plane, and an array of CMOS pixels for receiving images thereon, said image sensor further including circuitry means on said first plane and coupled to said array of CMOS pixels for timing and control of said array of CMOS pixels, said image sensor producing a pre-video signal;
Limitation 33.2	a first circuit board residing on a second plane and electrically communicating with said image	a first circuit board electrically communicating with said image sensor and separated from said image sensor,

	sensor, said first circuit board including circuitry means for converting said pre-video signal to a desired video format;	said first circuit board including circuitry means for converting said pre-video signal to a desired video format;
Limitation 33.3	a camera module housing said image sensor;	a camera module housing said image sensor;
Limitation 33.4	a transceiver/amplifier section electrically coupled to said first circuit board for transmitting, receiving, and amplifying video and audio signals;	a transceiver/amplifier section electrically coupled to said first circuit board for transmitting, receiving, and amplifying video and audio signals;
Limitation 33.5	digital signal processor electrically coupled to said first circuit board and said transceiver/amplifier section, said digital signal processor further conditioning said pre-video signal which is first conditioned by said first circuit board, and also for conditioning video and audio signals	a digital signal processor electrically coupled to said first circuit board and said transceiver/amplifier section, said digital signal processor further conditioning said pre-video signal which is first conditioned by said first circuit board, and also for conditioning video and audio signals

	from said transceiver/ amplifier section;	from said transceiver/ amplifier section;
Limitation 33.6	a microphone electrically communicating with said digital signal processor for receiving audio signals;	a microphone electrically communicating with said digital signal processor for recording and receiving audio signals;
Limitation 33.7	a speaker electrically communicating with said digital signal processor for broadcasting audio signals;	a speaker electrically communicating with said digital signal processor for broadcasting audio signals;
Limitation 33.8	a video monitor attached to said video phone, said video monitor for selectively displaying images from said imaging device, and for selectively displaying video images received by said transceiver/ amplifier section;	a video view screen attached to said PDA, said video view screen for selectively displaying images from said imaging device, and for selectively displaying video images received by said transceiver/ amplifier section;
Limitation 33.9	a video switch communicating with said first circuit board and said digital signal processor for	a video switch communicating with said first circuit board and said digital signal processor for

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	switching video images to be viewed on said video monitor;	switching video images to be viewed on said video view screen; and
Limitation 33.10	a power supply mounted to said video telephone for providing power thereto.	a power supply mounted to said PDA for providing power thereto.
Limitation 46.1		46. A device as claimed in claim 33, further including: a wireless telephone attached to said PDA.

-Table 4, claim 33 of the 626 Patent and claim 46 of the 369 Patent.

	The 626 Patent	The 369 Patent
preamble	34. A device, as claimed in claim 33,	34. A device, as claimed in claim 33,
Limitation 34.1	wherein: said first circuit board is placed adjacent said image sensor within said camera module.	wherein: said first circuit board is placed adjacent said image sensor within said camera module.

-Table 5, claim 34 of the 626 Patent and claim 34 of the 369 Patent.

	The 626 Patent	The 369 Patent
preamble	58. In a video telephone for receiving and transmitting communications to include video signals transmitted by the user of the phone, and video signals received from the party to whom a call was made, the video telephone including a video monitor for viewing the video signals, the improvement comprising:	58. In a PDA having capability to transmit data between a personal computer connected to a communications network, the PDA including a video view screen for viewing the video images, the improvement comprising:
Limitation 58.1	a camera module for taking video images, said camera module communicating with circuitry within said video telephone enabling viewing of said video images on said video telephone and enabling video signals to be transmitted from	a camera module for taking video images, said camera module communicating with circuitry within said PDA enabling viewing of said video images on said PDA and enabling video signals to be transmitted from said camera module to the personal computer, said camera module

	<p>said camera module for viewing by said party, said camera module including an image sensor housed therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon, said image sensor further including circuitry means electrically coupled to said array of said CMOS pixels for timing and control of said array of CMOS pixels, said circuitry means for timing and control placed remote from said array of CMOS pixels on a second plane, said image sensor producing a pre-video signal, a first circuit board electrically connected to said image sensor and lying in a third plane, said first circuit board including circuitry means for</p>	<p>including an image sensor housed therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon, said image sensor further including circuitry means electrically coupled to said array of said CMOS pixels for timing and control of said array of CMOS pixels, said circuitry means for timing and control placed remote from said array of CMOS pixels on a second plane, said image sensor producing a pre-video signal, a first circuit board electrically connected to said image sensor and lying in a third plane, said first circuit board including circuitry means for processing and converting said pre-video signal to a desired video format.</p>
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	processing and converting said pre-video signal to a desired video format.	
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-Table 6, claim 58 of the 626 Patent and claim 58 of the 369 Patent.

	The 626 Patent	The 369 Patent
preamble	64. A video telephone for conducting telephonic communications including receiving and transmitting video images between two parties of a telephone call, said video telephone comprising:	64. A PDA having capability for receiving and transmitting video and audio images between the PDA and a personal computer connected to a communications network, said PDA comprising:
Limitation 64.1	an image sensor lying in a first plane, and an array of CMOS pixels for receiving images thereon, said image sensor further including circuitry means electrically coupled to said array of CMOS pixels for timing and control of said	an image sensor lying in a first plane, and an array of CMOS pixels for receiving images thereon, said image sensor further including circuitry means electrically coupled to said array of CMOS pixels for timing and control of said array of CMOS

	array of CMOS pixels, said circuitry means for timing and control being placed remote from said array of CMOS pixels on a second plane, said image sensor producing a pre-video signal;	pixels, said circuitry means for timing and control being placed remote from said array of CMOS pixels on a second plane, said image sensor producing a pre-video signal;
64.2	a first circuit board electrically coupled with said image sensor and lying in a third plane, said first circuit board including circuitry means for processing and converting said pre-video signal to a desired video format;	a first circuit board electrically coupled with said image sensor and lying in a third plane, said first circuit board including circuitry means for processing and converting said pre-video signal to a desired video format;
64.3	a camera module housing said image sensor;	a camera module housing said image sensor;
64.4	a transceiver/amplifier section electrically coupled to said first circuit board for transmitting, receiving, and amplifying video and audio signals;	a transceiver/amplifier section electrically coupled to said first circuit board for transmitting, receiving, and amplifying video and audio signals;

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64.5	a digital signal processor electrically coupled to said first circuit board and said transceiver/ amplifier section, said digital signal processor further conditioning said pre-video signal which is first conditioned by said first circuit board, and also for conditioning video and audio signals from said transceiver/ amplifier section;	a digital signal processor electrically coupled to said first circuit board and said transceiver/ amplifier section, said digital signal processor further conditioning said pre-video signal which is first conditioned by said first circuit board, and also for conditioning video and audio signals from said transceiver/ amplifier section;
64.6	a microphone electrically communicating with said digital signal processor for receiving audio signals;	a microphone electrically communicating with said digital signal processor for recording and receiving audio signals;
64.7	a speaker electrically communicating with said digital signal processor for broadcasting audio signals;	a speaker electrically communicating with said digital signal processor for broadcasting audio signals;
64.8	a video monitor attached to said	a video view screen attached to said

	video phone, said video monitor for selectively displaying images from said imaging device, and for selectively displaying video images received by said transceiver/amplifier section;	PDA, said video view screen for selectively displaying images from said imaging device, and for selectively displaying video images received by said transceiver/amplifier section;
64.9	a video switch communicating with said first circuit board and said digital signal processor for switching video images to be viewed on said video monitor; and	a video switch communicating with said first circuit board and said digital signal processor for switching video images to be viewed on said video view screen; and
64.10	a power supply mounted to said video telephone for providing power thereto.	a power supply mounted to said PDA for providing power thereto.

-Table 7, claim 64 of the 626 Patent and claim 64 of the 369 Patent.

ii. Because claims of the 626 Patent recites the open ended transitional phrase “comprising”, they do not preclude the additional elements recited by the corresponding claims of the 369 Patent.

iii. Claims 1, 5, 11, 33, 34, 58, and 64 of the 626 Patent are directed to a wireless telephone for conducting wireless telephonic communications while claims 14, 5, 11, 46, 34, 58, and 64 of the 369 Patent

are directed to a PDA having capability to transmit data between a personal computer connected to a communications network. However, the wireless telephone of claim 1 of the 626 Patent and the PDA of claim 14 of the 369 Patent have the same structure, i.e., they both comprise a video system which comprises a camera and a video monitor or a video view screen. Both of the cameras in claim 1 of the 626 Patent and in claim 14 of the 369 Patent have the same structure and the video monitor of claim 1 of the 626 Patent and the video view screen of claim 14 of the 369 Patent have the same structure. So are devices of claims 5, 11, 33, 34, 58, and 64 of the 626 Patent and the devices of claims 5, 11, 46, 34, 58, and 64 of the 369 Patent.

iv. Claim 14 of the 369 Patent further recites “a device as claimed in claim 1, further including: a wireless telephone attached to said PDA.” Claim 46 of the 369 Patent recites “a device as claimed in claim 33, further including: a wireless telephone attached to said PDA.” The wireless phone attached to a PDA as claimed in claim 14 or claim 49 of the 369 Patent is also a wireless telephone. In other words, the scope of claim 1 of the 626 Patent includes that of claim 14 of the 369 Patent and vice versa and the scope of claim 33 of the 626 Patent includes that of claim 46 of the 369 Patent and vice versa or the scope of claim 1 and claim 33 are broader than that of claims 14 and 46 of the 369 Patent.

v. As interpreted in the Claim Interpretation section, a wireless telephone can include a PDA and vice versa and having device with a PDA with a wireless telephone is convenient to users. Therefore it would have been obvious to one of ordinary skills in

the art, at the time of invention of the 626 Patent, to use the same structure as the PDA with an attached wireless phone recited in the claims of the 369 Patent as a wireless telephone as recited in the claims of the 626 Patent. In other words the claims of the 626 Patent are obvious in view of the claims of the 369 Patent because a PDA can include or can be a wireless phone or a wireless telephone can include a PDA as it is known in the art at the time of invention of the 626 Patent and the 369 Patent. Further, since both the claims of the 626 Patent and the 369 Patent are in Jepson formats, it is an admission by the Patent Owner that both a wireless telephone and a PDA are the invention of another (MPEP 2129.III “Drafting a claim in Jepson format (i.e., the format described in 37 CFR 1.75(e); see MPEP § 608.01(m)) is taken as an implied admission that the subject matter of the preamble is the prior art work of another. In re Fout, 675 F.2d 297, 301, 213 USPQ 532, 534 (CCPA 1982) (holding preamble of Jepson-type claim to be admitted prior art where applicant’s specification credited another as the inventor of the subject matter of the preamble).”). Because a PDA and a wireless telephone are known in the art, the improvement of components recited in the 626 Patent and 369 Patent are basically the same, the claims of the 626 patent would be obvious to one of ordinary skills in the art, at the time of invention of the 626 Patent, in view of the PDA with an attached wireless telephone or simply a wireless phone and the same improvements cited in the corresponding claims of 369 Patent.

B. Claims 1, 5, 11, 33, 34, 58, and 64 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 14, 5, 11, 46, 34, 58, and 64 of the 369 Patent in view of Nguyen. Although

the claims at issue are not identical, they are not patentably distinct from each other because

i. Claim 1 of the 626 Patent and claim 14 of the 369 Patent recite common subject matter; so are claims 5, 11, 33, 34, 58, and 64 and claims 5, 11, 46, 34, 58, and 64 of the 369 Patent respectively. See Tables 1-7 above.

ii. Because claims of the 626 Patent recites the open ended transitional phrase “comprising”, they do not preclude the additional elements recited by corresponding claims of the 369 Patent.

iii. Claims 1, 5, 11, 33, 34, 58, and 64 of the 626 Patent are directed to a wireless telephone for conducting wireless telephonic communications while claims 14, 5, 11, 46, 34, 58, and 64 of the 369 Patent are directed to a PDA having capability to transmit data between a personal computer connected to a communications network. However, the wireless telephone of claim 1 of the 626 Patent and the PDA of claim 14 of the 369 Patent have the same structure, i.e., they both comprise a video system which comprises a camera and a video monitor or video view screen. Both of the cameras in claim 1 of the 626 Patent and in claim 14 of the 369 Patent have the same structure and the video monitor of claim 1 of the 626 Patent and the video view screen of claim 14 of the 369 Patent have the same structure. So are devices of claims 5, 11, 33, 34, 58, and 64 of the 626 Patent and the devices of claims 5, 11, 46, 34, 58, and 64 of the 369 Patent.

iv. In the same field of PDA and wireless telephone (Abstract of Nguyen), Nguyen discloses a personal communication terminal that functions as a

wireless telephone and a PDA (Abstract of Nguyen, “*The PCT may be operated as a standard wireless telephone, as a personal computer, or in an integrated mode for FAX, wireless data transfer, or sending and receiving short message service (SMS) message.*”). It is convenient to use a portable computer and connect it to a mobile telephone so that text and images can be displayed (page 1, lines 19-29 of Nguyen). Therefore it would have been obvious to one of ordinary skills in the art, at the time of invention of the 369 Patent, to use the structure of a PDA with an attached wireless telephone as recited in the claims of 369 Patent as the wireless telephone as recited in the claims of the 626 Patent.

v. Further, the combination of the claims of the 369 Patent with Nguyen is supported by (B) Simple substitution of one known element for another to obtain predictable results because substituting the PDA of the 369 Patent by the wireless telephone or PCT of Nguyen which includes a PDA and a wireless telephone will obtain predictable results.

VIII. RESPONSE TO ARGUMENTS

A. Summary

The Sep 2020 Response has been considered in its entirety. A summary of the Examiner’s response is listed below.

1. The arguments by the Patent Owner using *Novartis AG v. Ezra Ventures LLC* are not persuasive because this case does not apply nor control in the instant *ex parte* reexamination proceeding.

2. The 369 Patent was not cited nor appeared on the face of the 626 Patent. There is no evidence that the former examiner has considered the double

patenting issue set forth above in Section VII when the application for 626 Patent was being prosecuted. In other words, the 369 Patent is a new reference for the 626 Patent. Even if the 369 Patent was considered during the prosecution of the 626 Patent, the double patenting rejection set forth above is presented in a new light or in a different way.

3. The priority date of the 626 Patent is determined to be the filing date of the 027 application, i.e., Jul 10, 2000.

B. Arguments based on court cases

1. *Novartis AG v. Ezra Ventures LLC*

Based on *Novartis AG v. Ezra Ventures LLC*, 909 F.3d 1367, 1373-75 (Fed. Cir. 2018) (“*Novartis*”), Patent Owner argues:

1. “obviousness-type double patenting is a judicially created doctrine that is inferior to a statutory grant of additional patent term, such as PTA pursuant to 35 U.S.C. § 154” (Response, p. 3, See also Response at pp. 7 and 9)

2. “obviousness-type double patenting does not apply where the only difference in expiration dates of the involved patents” (Response, p. 10)

3. “For the same reasoning in *Novartis* that obviousness-type double patenting did not apply to a patent subject to a statutory grant of additional patent term which created different expiration dates (and purportedly opened the door to a double patenting rejection), obviousness type double patenting does not apply here where statutory grants of additional patent term solely account for the different expiration dates of the ‘626 Patent and the

'369 Patent. These statutory grants of additional patent term to the '626 and '369 Patents cannot be the basis to open the door to a double patenting rejection was solely due to a statutory grant of additional patent term" (Response, p. 11).

Other sections of the Response also present similar arguments (Response, Section III, pp. 6-14).

The Examiner disagrees.

First, *Novartis* does not apply nor control for the double patenting rejection advanced here because *Novartis* addresses Patent Term Extension ("PTE") while there is no PTE in the two patents involved, *i.e.*, the 626 Patent and the 369 Patent. The *Novartis* court expressly states

We then noted the contrast between § 156 for PTE with the language of § 154 for patent term adjustments: § 154 "expressly excludes patents in which a terminal disclaimer was filed from the benefit of a term adjustment for PTO delays," but § 156 contains "no similar provision that excludes patents in which a terminal disclaimer was filed from the benefits of Hatch-Waxman extensions." *Id.* at 1322.

-*Novartis*, 909 F.3d 1374.

In other words, the treatments of obviousness-type double patenting rejection ("ODP") in patents with PTE and patents with patent term adjustment ("PTA") are different because the statutes are different. *Novartis* does not apply nor control in the instant proceeding because PTE does not apply to either of the 626 Patent or the 369 Patent.

Patent Owner further asserts

But for the PTA awarded by the Patent Office pursuant to 35 U.S.C. § 154 to the '626 Patent and to the '369 Patent, these patents would have the same expiration dates and obviousness-type double patenting would not apply. See *Novartis AG*, 909 F.3d at 1375 (“judge made doctrine” of obviousness-type double patenting not applied to cut off statutory grant of additional patent term).

-Response, p. 14.

Patent Owner's arguments are not persuasive. As pointed out above, *Novartis* only applies to PTE and the *Novartis* court clearly makes distinction between double patenting between PTE and PTA. Further, even if both patents have the same expiration date, ODP would still be advanced based on the need of preventing possible harassment by multiple assignees.

2. Arguments related to pre-GATT and post GATT and other court cases

Patent Owner argues that the cases cited in the double patenting rejection in Section VII above are inappropriate and are not controlling because they are pre-GATT and none of them “relate to a change in patent expiration dates solely due to PTA under 35 U.S.C. § 154.” (Response, pp. 9-14).

Patent Owner's arguments are not persuasive.

MPEP 2258.I states:

Typically, substantial new questions of patentability and rejections in a reexamination proceeding are based on “prior art” patents and publications. However, there are exceptions, even for reexaminations ordered under 35 U.S.C. 304.

For example, in *In re Lonardo*, 119 F.3d 960, 43 USPQ2d 1262 (Fed. Cir. 1997), the Federal Circuit upheld a nonstatutory double patenting rejection in which the patent upon which the rejection was based and the patent under reexamination shared the same effective filing date.

MPEP 2258 I.D states:

Double patenting is normally proper for consideration in reexamination under 35 U.S.C. 302. See *In re Lonardo*, 119 F.3d 960, 43 USPQ2d 1262 (Fed. Cir. 1997). In *Lonardo*, the Federal Circuit reviewed and interpreted the language of 35 U.S.C. 303 and stated that:

Since the statute in other places refers to prior art in relation to reexamination, see *id.*, it seems apparent that Congress intended that the phrases ‘patents and publications’ and ‘other patents or printed publications’ in section 303(a) not be limited to prior art patents or printed publications. . . . Finally, it is reasonable to conclude that Congress intended to include double patenting over a prior patent as a basis for reexamination because maintenance of a patent that creates double patenting is as much of an imposition on the public as maintenance of patent that is unpatentable over prior art. Thus, we conclude that the PTO was authorized during reexamination to consider the question of double patenting based upon the ‘762 patent.

In re Lonardo, 119 F.3d at 966, 43 USPQ2d at 1266. Accordingly, the issue of double patenting, over prior art patents or non-prior art patents, is

appropriate for consideration in reexamination under 35 U.S.C. 302, both as a basis for ordering reexamination under 35 U.S.C. 304 and during subsequent examination on the merits. The issue of double patenting is to be considered by the examiner when making the decision on the request for reexamination. The examiner should determine whether the issue of double patenting raises a substantial new question of patentability. The issue of double patenting is also to be considered during the examination stage of reexamination proceeding. In the examination stage, the examiner should determine whether a rejection based on double patenting is appropriate.

In other words, whether the patents are pre-GATT or post-GATT, the double patenting issue is appropriate to consider, and the cases including *In re Londardo* are applicable and controlling. The purpose of nonstatutory double patenting rejection is to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees (see MPEP 804) whether the patents are pre-GATT or post-GATT. The ODP rejection set forth in this office action is to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and possible harassment by multiple assignees regardless whether PTA is granted or whether the patents are pre-GATT or post-GATT. The ODP issues are the same.

C. Arguments based on consideration by the former examiner

Patent Owner argues:

Examiner Rao conducted interference searches in Classes 348 and 455. Both the '626 Patent and the '369 Patent are classified in Classes 348 and 455, as shown on the face of the patents. No obviousness-type double patenting rejection was issued against the '626 Patent or the '369 Patent based on the interference searches. As a result, no substantial new question of patentability is raised by the obviousness-type double patenting rejections - that issue was already considered during original prosecution of the '626 Patent.

-Response, p. 2.

Patent Owner and the Declaration by Mr. Spar make similar arguments in Response at pp. 4-5, 8, 11 and 15.

Patent Owner's arguments are not persuasive.

First, Patent Owner fails to provide evidence that the former examiner has considered the ODP issues between the 626 Patent and the 369 Patent. The 369 Patent does not appear on the face of the 626 Patent and vice versa. Simply providing the interference search record with two similar classes is not sufficient to show whether the former examiner had considered the obviousness type double patenting issue.

Second, even if the former examiner had considered the ODP issue, the same reference, i.e., the 369 Patent can be applied or considered in a new light or in a different way in this proceeding.

MPEP § 2216 states:

The legal standard for ordering ex parte reexamination, as set forth in 35 U.S.C. 303(a), requires a substantial new question of

patentability. The substantial new question of patentability may be based on art previously considered by the Office if the reference is presented in a new light or a different way that escaped review during earlier examination.

In other words, even if the former examiner had considered the ODP issues based on the 369 Patent, the ODP rejection set forth in this office action is presented in a new light or a different way that escaped review during earlier examination and a substantial new question of patentability can be raised. Because there is no evidence that the former examiner expressly considered ODP issues of the 626 Patent in respect to the 369 Patent, the double patenting issue set forth in the Request is considered to raise a bona fide new question of patentability. Therefore a substantial new question of patentability of the claims of the 626 Patent based on the claims of the 369 Patent is appropriate and can be raised.

D. Arguments related to common ownership

Patent Owner argues:

Additionally, the '626, '369, and related patents are currently in, and have always been in, common ownership, so there is no risk to the public of harassment from multiple assignees attempting to enforce the same rights. Adair Deck ¶¶ 21-24. The attached declaration of coinventor Jeffrey Adair, who also is an officer of the Patent Owner, states that the '626 Patent will not be sold by Patent Owner separate from the entire patent family related to the '626 Patent - making clear that there can be no risk to the public of harassment from multiple assignees attempting to enforce the same rights. *Id.*

-Response, p. 5.

Collect, a wholly owned subsidiary of Micro-Imaging Solutions, Inc. (“MIS”), is the assignee of the ‘626 Patent and MIS has retained ownership of the priority ‘901 Patent. Adair Decl. ¶¶ 21-24. Since the ‘626, ‘369 and related Patents are all owned by either MIS or Collect, its wholly owned subsidiary, the Patents are in common ownership; thus, there is no risk to the public of harassment from multiple assignees attempting to enforce the same rights. In re Jentojt, 392 F.2d 633, 641 (C.C.P.A. 1968) (“When there is common ownership, we think harassment by multiple suits is most unlikely.

-Response, p. 16.

Similar arguments are presented in Response at pp. 2, 5, 13, and 16.

Patent Owner’s arguments are not persuasive.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. Even if both patents are commonly owned, there is the issue of preventing “the unjustified or improper timewise extension of the “right to exclude” granted by a patent.” Therefore the ODP rejection set forth above is appropriate.

E. Arguments related to the priority date of the 626 Patent

Regarding the priority date of the 626 Patent, Patent Owner argues

Regarding the '626 Patent's priority claim to the '901 Patent, however, Patent Owner explained that the '901 Patent specification more than reasonably conveys to a person skilled in the art that Patent Owner had possession of the claimed inventive reduced area imaging device as applied to wireless applications, including in wireless telephones. As an example, Patent Owner explained that the '901 Patent describes and builds on the CMOS imager work that Dr. Eric Fossum performed for NASA as part of NASA's efforts to develop imager products suited for spacecraft - products that would inherently be designed for and capable of wireless applications. The '901 Patent also includes and references articles describing Dr. Fossum's work for NASA, which again expressly suggests to a person skilled in the art wireless applications of the claimed imaging devices.

...

-Response, p. 3.

Patent Owner and declarations submitted by the Patent Owner present similar arguments in other sections including Section IV of the Response.

The Examiner disagrees. Although the determination of the priority date of the 626 Patent is not relevant to the double patenting rejection set forth in Section VII of this office action, to set the record clear, the Examiner responds to this argument below.

The relevant paragraph in the 901 Patent is

A further discussion of the timing and control circuitry found on board 40 and incorporated with the pixel array 90 is described in an article entitled “Active Pixel Image Sensor Integrated With Readout Circuits” appearing in NASA Tech Briefs, pp. 38 and 39 of the October, 1996 publication. The disclosure of this particular article is also incorporated by reference herein.

-the 901 Patent, col. 10, lines 8-15.

The only section in the 901 Patent that has the word “NASA” is enclosed above. The 901 Patent is silent on wireless, let alone “wireless telephone.”

First, just because an article describing pixel arrays in NASA Tech Brief does not mean that the disclosed pixel arrays are used in a NASA spacecraft.

Second, even if the pixel arrays are intended to be used in NASA’s spacecraft, it does not inherently teach a “wireless telephone” as argued or claimed by the Patent Owner because the 901 Patent fails to describe any structure related to the wireless telephone claimed in the 626 Patent other than the imager. In other words, just because communication in space is wireless does not mean a “wireless telephone” is described or inherently supported. A radio receiver receiving broadcast signals from radio stations has been used wirelessly for a long time. By the same reason, disclosing a radio receiver does not inherently disclose a “wireless telephone.” A wireless telephone has many different components than an imager or a radio receiver and has different use or purpose. By disclosing a component such as an imager that can potentially be used in a wireless telephone

does not mean that it sufficiently discloses the wireless telephone. As an example, disclosing a piece of glass used in radio as a cover does not mean that it discloses the radio. A radio receiver is a good example that when wireless communication is disclosed, it does not inherently disclose a wireless telephone.

Patent Owner also presents arguments similar to arguments enclosed below (Response at pp. 3, 6, 17-18, 20-21):

Moreover, the Federal Circuit's recent decision in *Immunex*, makes clear that support for claims under 35 U.S.C. § 112 includes the understanding of persons skilled in the art in light of the description in the specification, including guidance provided by additional materials suggested by the specification. 964 F.3d at 1064. Applying *Immunex* here, the '901 Patent, and thus the '626 Patent, more than reasonably conveys to a person skilled in the art possession of the inventive reduced area image device recited in claims 1, 5, 11, 33, 34, 58 and 64 of the '626 Patent as applied to wireless telephones - based on the express teachings in the specification, as well as suggestions in the specification for additional materials to be considered by a person skilled in the art.

-Response, p. 6.

For example, in *Immunex*, the issue was whether the priority application disclosed possession of the claimed invention - namely, whether the lack of a description of a full-length p75 DNA sequence was supported where the specification described a truncated/mutated p75 DNA

sequence. *Immunex*, 964 F.3d at 1063. Defendant Sandoz argued that written description for the sequence could not come from outside the patent. *Id.* In response, *Immunex* argued that the specification included a sequence identifier that would have led a person skilled in the art to the complete sequence, including a reference in the specification to an article which would have directed a person skilled in the art to the full sequence. *Id.* at 1063-64. The Federal Circuit agreed with *Immunex*, finding that the inventors possessed the full-length sequence. *Id.* at 1064.

-Response, p. 21.

Patent Owner's arguments are not persuasive.

As can be seen from cited paragraphs from the Response above, in *Immunex*, there is a description of a truncated/mutated p75 DNA sequence and a sequence identifier that would have led a person skilled in the art to the complete sequence. However in the instant case, there is no description whatsoever about a wireless telephone other than an imager and the only term that could be possibly linked to wireless application is the name of a journal called "NASA TECH BRIEFS." How would a person skilled in the art be led to a wireless telephone from an imager disclosed in the 901 Patent? The *Immunex* case does not really match with the situation here since there is no description of a wireless telephone at all in the 901 Patent.

Because the 901 Patent does not sufficiently disclose a "wireless telephone" claimed in the 626 Patent, the priority date of the 626 Patent is

determined to be the filing date of the 027 application, i.e., Jul 10, 2000.

IX. CONCLUSION

THIS ACTION IS MADE FINAL.

A shortened statutory period for response to this action is set to expire 2 months from the mailing date of this action.

Extensions of time under 37 C.F.R. § 1.136(a) do not apply in reexamination proceedings. The provisions of 37 C.F.R. § 1.136 apply only to “an applicant” and not to parties in a reexamination proceeding. Further, in 35 U.S.C. § 305 and in 37 C.F.R. § 1.550(a), it is required that reexamination proceedings “will be conducted with special dispatch within the Office.”

Extensions of time in reexamination proceedings are provided for in 37 C.F.R. § 1.550(c). A request for extension of time must specify the requested period of extension and it must be accompanied by the petition fee set forth in 37 CFR 1.17(g). Any request for an extension in a third party requested ex parte reexamination must be filed on or before the day on which action by the patent owner is due, and the mere filing of a request will not effect any extension of time. A request for an extension of time in a third party requested ex parte reexamination will be granted only for sufficient cause, and for a reasonable time specified. Any request for extension in a patent owner requested ex parte reexamination (including reexamination ordered under 35 U.S.C. § 257) for up to two months from the time period set in the Office action must be filed no later than two months from the expiration of the time period set in the Office action. A request for an extension in a

patent owner requested ex parte reexamination for more than two months from the time period set in the Office action must be filed on or before the day on which action by the patent owner is due, and the mere filing of a request for an extension for more than two months will not effect the extension. The time for taking action in a patent owner requested ex parte reexamination will not be extended for more than two months from the time period set in the Office action in the absence of sufficient cause or for more than a reasonable time.

The filing of a timely first response to this final rejection will be construed as including a request to extend the shortened statutory period for an additional two months. In no event, however, will the statutory period for response expire later than SIX MONTHS from the mailing date of the final action. See MPEP § 2265.

In order to ensure full consideration of any amendments, affidavits or declarations, or other documents as evidence of patentability, such documents must be submitted in response to this Office action. Submissions after the next Office action, which is intended to be a final action, will be governed by the requirements of 37 C.F.R. § 1.116, after final rejection and 37 C.F.R. § 41.33 after appeal, which will be strictly enforced.

Patent owner is reminded of the continuing responsibility under 37 C.F.R. § 1.565(a), to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving the '538 Patent throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286. The

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third party requester is similarly apprised of the ability to disclose such proceedings.

Any inquiry concerning this communication or as to the status of this proceeding, should be directed to the Central Reexamination Unit at telephone number (571) 272-7705 or directed to Yuzhen Ge at telephone number (571) 272-7636 or Andrew J. Fischer, the SPE of Yuzhen Ge, at (571) 272-6779.

Signed:

/YUZHEN GE/
Primary Examiner, Art Unit 3992
(571) 272-7636

Conferees:

/COLIN M LAROSE/
Primary Examiner, Art Unit 3992

/ANDREW J. FISCHER/
Supervisory Patent Reexamination Specialist,
Art Unit 3992

APPENDIX I

Reexamination Control No. 90/014,457
Patent Under Reexamination: 7,002,621
Art Unit: 3992

Dated: Dec. 10, 2020

EX PARTE REEXAMINATION COMMUNICATION

Notice of Pre-AIA or AIA Status

The present application is being examined under the pre-AIA first to invent provisions.

The References

(1) U.S. Patent No. 6,452,626 was filed on July 10, 2000 and issued on September 17, 2002 to Edwin L. Adair, Jeffrey L. Adair, and Randall S. Adair (the “626 patent” or “626”)

(2) U.S. Patent No. 6,009,336 was filed on July 10, 1996 and issued on December 28, 1999 to Darryl R. Harris, Daniel L. Williams, and Thomas J. Walczak (“Harris”)

(3) Bluetooth® Technology Overview
(<https://web.archive.org/web/1.9991008042723/http://www.bluetooth.com/v2/document/default.asp>)

(4) Bluetooth® and Video

(<https://web.archive.org/web/20010418195743/http://www.blietoQth.coiTj/text/bluetoothguide/intro/intro.asp?action-sas>)

(5) U.S. Patent No. 6,590,928 was filed on September 17, 1997 and issued on July 8, 2003 to Jacobus Cornelis Haartsen (“Haartsen”)

(6) IEEE 802.15 WPAN Task Group 3 Website (“IEEE 802.15.3 Overview”) (<https://web.archive.org/web/20001028200924/http://www.ieee802.org/1.5/pub/TG3.html>)

(7) IEEE 802.15 WPAN High Rate Task Group (TG3) (“IEEE 802.15 TG3”) (<https://web.archive.org/web/20000619194224/http://rouper.ieee.org:80/groups/802/15/p>)

Rejections

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created Page 3 doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA

1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on nonstatutory double patenting provided the reference application or patent either is shown to be commonly owned with the examined application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. See MPEP § 717.02 for applications subject to examination under the first inventor to file provisions of the AIA as explained in MPEP § 2159. See MPEP §§ 706.02(I)(1) - 706.02(I)(3) for applications not subject to examination under the first inventor to file provisions of the AIA. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO Internet website contains terminal disclaimer forms which may be used. Please visit www.uspto.gov/patent/patents-forms. The filing date of the application in which the form is filed determines what form (e.g., PTO/SB/25, PTO/SB/26, PTO/AIA25, or PTO/AIA26) should be used. A web-based eTerminal Disclaimer may be filled out completely online using web-screens. An eTerminal Disclaimer that meets all requirements is auto-processed and approved immediately upon submission. For more information about eTerminal Disclaimers, refer to www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp.

Claims 25-29 and 33 are rejected on the ground of non-statutory double patenting as being unpatentable over claims 52, 55 and 61 of U.S. Patent

No. 6,452,626 (hereinafter referred to as '626 patent). Although the claims at issue are not identical, they are not patentably distinct from each other because the claim language is directed to a same invention and minor differences in the claims would have been obvious to one of ordinary skill in the art at the time the invention was made.

U.S. Patent under reexamination No. 7,002,621	U.S. Patent '626
<p>Claim 25: In a wireless telephone for conducting wireless telephonic communications,</p> <p>the improvement comprising: a video system integral with said telephone for receiving and transmitting video images, and for viewing said images, said video system comprising: a camera module housing an image sensor therein,</p> <p>said image sensor lying in a first plane and including an array of pixels for receiving images thereon,</p> <p>circuitry means electrically coupled to said array of pixels for timing and control of said array of pixels, said circuitry means</p>	<p>Claim 52: In a wireless telephone for conducting wireless telephonic communications,</p> <p>the improvement comprising: a video system integral with said telephone for receiving and transmitting video images, and for viewing said images, said video system comprising: a camera module housing an image sensor therein,</p> <p>said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon,</p> <p>circuitry means electrically coupled to said array of CMOS pixels for timing and control of said array of CMOS pixels, said circuitry means for timing</p>

<p>for timing and control being placed remote from said array of pixels on a second plane,</p> <p>said image sensor producing a pre-video signal,</p> <p>a first circuit board lying in a third plane and electrically coupled to said image sensor, said first circuit board including circuitry means for processing and converting said pre-video signal to a desired video format,</p> <p>a transceiver radio element communicating with said first circuit board for transmitting said converted pre-video signal; a transceiver radio module mounted in said telephone for wirelessly receiving said converted pre-video signal; and a video monitor attached to said wireless phone for viewing said video images, said video monitor communicating with said transceiver radio module, and displaying video</p>	<p>and control being placed remote from said array of CMOS pixels on a second plane,</p> <p>said image sensor producing a pre-video signal,</p> <p>a first circuit board lying in a third plane and electrically coupled to said image sensor, said first circuit board including circuitry means for processing and converting said pre-video signal to a desired video format;</p> <p>and a video monitor attached to said wireless phone for viewing said video images, said video monitor communicating with said first circuit board, and displaying video images processed by said first circuit board.</p> <p>Claim 52 does not explicitly disclose that video monitor can wirelessly communicate via RF signal with transceiver which is in contact with the first circuit board. On the other hand, as the Patent Owner</p>
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<p>images processed by said first circuit board.</p>	<p>of US Patent '621 explained in column 4, line 65 to column 5, line 35, Bluetooth technology which allows for RF wireless communication is well known in the art. Since language of claim 25 does not recite specific structure associated with wireless transmission, one of ordinary skill in the art at the time the invention was made would consider obvious to modify system and use widely available wireless transmission such as Bluetooth and use it in place of physical connection in order to improve flexibility and convenience by eliminating the need for additional wires.</p>
<p>Claim 26: A device, as claimed in claim 25, wherein: said pixels are CMOS pixels.</p>	<p>Claim 52: . . . said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon. . .</p>
<p>Claim 27: A device, as claimed in claim 25, wherein: said transceiver radio element communicates with the video telephone by a</p>	<p>Claim 52 does not explicitly disclose that video monitor can wirelessly communicate via RF signal with transceiver which is in contact with the first</p>

<p>Bluetooth communications standard.</p>	<p>circuit board. On the other hand, as the Patent Owner of US Patent '621 explained in column 4, line 65 to column 5, line 35, Bluetooth technology which allows for RF wireless communication is well known in the art. Since language of claim 25 does not recite specific structure associated with wireless transmission, one of ordinary skill in the art at the time the invention was made would consider obvious to modify system and use widely available wireless transmission such as Bluetooth and use it in place of physical connection in order to improve flexibility and convenience by eliminating the need for additional wires.</p>
<p>Claim 28: A device, as claimed in claim 25, wherein: said transceiver radio element communicates with the video telephone by an IEEE 802.15.3 communications standard.</p>	<p>In addition to the explanation as provided above in reference to claim 27, the Examiner would also like to add that IEEE 802.15.3 communication standard was well known in the art at the time the invention was made (see</p>

	'621 patent column 5, lines 1-35)
<p>Claim 29: In a video telephone for receiving and transmitting telephone communications to include video signals transmitted by the user of the phone, and video signals received from the party to whom a call is made,</p> <p>the video telephone including a video monitor for viewing the video signals, the improvement comprising: a camera module for taking video images, said camera module communicating with circuitry within said video telephone</p> <p>enabling video signals to be transmitted from said camera module to said video telephone for viewing by said user or for further transmission to another party,</p>	<p>Claim 55: In a video telephone for receiving and transmitting telephone communications to include video signals transmitted by the user of the phone, and video signals received from the party to whom a call is made,</p> <p>the video telephone including a video monitor for viewing the video signals, the improvement comprising: a camera module for taking video images, said camera module communicating with circuitry within said video telephone</p> <p>enabling viewing on said video telephone and enabling video signals to be transmitted from said camera module by said party for viewing,</p> <p>As disclosed in claim 55, the camera module transmits data and video telephone is used to view content, thus camera transmits data to the video telephone. Furthermore,</p>

<p>said camera module including an image sensor housed therein, said image sensor lying in a first plane and including an array of pixels for receiving images thereon,</p> <p>said image sensor producing a pre-video signal, a first circuit board mounted adjacent said image sensor and electrically connected to said image sensor,</p>	<p>since telephone is capable of transmitting data, it would also have been obvious to one of ordinary skill in the art at the time the invention was made, that if needed, the content could be transmitted further to another party.</p> <p>said camera module including an image sensor housed therein, said image sensor lying in a first plane and including an array of CMOS pixels for receiving images thereon,</p> <p>said image sensor producing a pre-video signal, a first circuit board lying in a second plane and electrically connected to said image sensor,</p> <p>Since image sensor is connected electronically, it would have been obvious that image sensor would need to be in close proximity to the board to allow for easier connection. In addition '626 patent also discusses sensor being adjacent to the circuit board (column 8, lines 17-20).</p>
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<p>said first circuit board including circuitry means for timing and control of said array of pixels and circuitry means for processing and converting said pre-video signal to a desired video format,</p> <p>and a transceiver radio element communicating with said first circuit board for wirelessly transmitting said converted pre-video signal.</p>	<p>said first circuit board including circuitry means for timing and control of said array of CMOS pixels and circuitry means for processing and converting said pre-video signal to a desired video format.</p> <p>Claim 55 does not explicitly disclose that video monitor can wirelessly communicate via RF signal with transceiver which is in contact with the first circuit board. On the other hand, as the Patent Owner of US Patent '621 explained in column 4, line 65 to column 5, line 35, Bluetooth technology which allows for RF wireless communication is well known in the art. Since language of claim 25 does not recite specific structure associated with wireless transmission, one of ordinary skill in the art at the time the invention was made would consider obvious to modify system and use widely available wireless transmission such as Bluetooth and use it in place of physical connection in order to</p>
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	improve flexibility and convenience by eliminating the need for additional wires.
<p>Claim 33: In a video telephone for receiving and transmitting telephone communications to include video signals transmitted by the user of the phone, and video signals received from the party to whom a call is made, the video telephone including a video monitor for viewing the video signals, the improvement comprising:</p> <p>a camera module for taking video images, said camera module communicating with circuitry within said video</p> <p>enabling video signals to be transmitted from said camera module to said</p>	<p>Claim 61: A video telephone for conducting telephonic communications including receiving and transmitting video images between two parties of a telephone call, said video telephone comprising:</p> <p>video monitor attached to said video phone and video monitor for selectively displaying images from said imaging device, and for selectively displaying video images received by said transceiver/amplifier section</p> <p>a camera module housing said image sensor;</p> <p>an image sensor lying in a first plane including an array of CMOS pixels for receiving images thereon, said image sensor producing a pre-video signal</p> <p>a transceiver/amplifier section electrically coupled to said first circuit board</p>

<p>video telephone for viewing by said user or for further transmission to another party,</p> <p>said camera module including an image sensor housed therein and lying in a first plane, said image sensor including an array of pixels for receiving images thereon, said image sensor producing a pre-video signal,</p> <p>and a transceiver radio element communicating with said image sensor for wirelessly transmitting said pre-video signal.</p>	<p>for transmitting, receiving, and amplifying video and audio signals;</p> <p>video monitor for selectively displaying images from said imaging device, and for selectively displaying video images received by said transceiver/amplifier section</p> <p>a camera module housing said image sensor;</p> <p><i>[an image sensor lying in a first plane including an array of CMOS pixels for receiving images thereon, said image sensor producing a pre-video signal];</i></p> <p>a first circuit board lying in a second plane electrically communicating with said image sensor, said first circuit board including circuitry means for timing and control of said array of CMOS pixels and circuitry means for processing and converting said pre-video signal to a desired video format;</p> <p>Claim 61 does not explicitly recite that video</p>
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	<p>monitor can wirelessly communicate via RF signal with transceiver which is in contact with the first circuit board. On the other hand, as the Patent Owner of US Patent '621 explained in column 4, line 65 to column 5, line 35, Bluetooth technology which allows for RF wireless communication is well known in the art. Since language of claim 25 does not recite specific structure associated with wireless transmission, one of ordinary skill in the art at the time the invention was made would consider obvious to modify system and use widely available wireless transmission such as Bluetooth and use it in place of physical connection in order to improve flexibility and convenience by eliminating the need for additional wires.</p> <p><i>[a camera module housing said image sensor];</i></p> <p><i>[a transceiver/amplifier section electrically coupled to said first circuit board for transmitting, receiving,</i></p>
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	<p><i>and amplifying video and audio signals];</i></p> <p>a digital signal processor electrically coupled to said first circuit board and said transceiver/amplifier section, said digital signal processor further conditioning said pre-video signal which is first conditioned by said first circuit board, and also for conditioning video and audio signals from said transceiver/amplifier section; a microphone electrically communicating with said digital signal processor for receiving audio signals; a speaker electrically communicating with said digital signal processor for broadcasting audio signals;</p> <p><i>[a video monitor attached to said video phone, and video monitor for selectively displaying images from said imaging device, and for selectively displaying video images received by said transceiver/amplifier section];</i></p> <p>a video switch communicating with said</p>
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	first circuit board and said digital signal processor for switching video images to be viewed on said video monitor; and a power supply mounted to said video telephone for providing power thereto.
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Note that some sections of claim 61 in ‘626 patent have been enclosed in square brackets “[]”. This has been done in order to indicate which parts of the claim were taken out of order and have been rearranged in order to clearly map claim 33 of ‘621 patent to claim 61 of ‘626 patent.

Affidavits

Affidavits by Robert Spar and Jeffrey Adair have been acknowledged and considered.

Notice under 37 CFR 1.565

Patent owner filed a paper entitled “Supplemental Notice Per 37 CFR § 1.565,” dated Nov. 20, 2020, which referenced a Nov. 6, 2020 paper, and such Nov. 6 paper was never filed in this reexamination. It appears that patent owner is referring to papers, filed in related reexamination proceedings, where such papers have been expunged, because they exceeded the bare notice permitted by rule 1.565 and MPEP 2282.

Patent owner later endeavored to circumvent those expungements, by referencing, in those other reexaminations, its ostensible “interview summary” in the response at hand--patent owner’s response to the non-final rejection (*i.e.*, patent owner’s pp 2-5). However, patent owner mischaracterized the

interview, and much of patent owner's purported summary was actually new arguments.

To the extent that such purported interview summary is intended to be a notice of concurrent proceedings, it too exceeds the bare notice permitted by rule 1.565 and MPEP 2282. Accordingly, certain parts of that ostensible interview summary are not being considered, such as the bold allegation that the Patent Trial and Appeal Board (PTAB) violated the Administrative Procedures Act (APA).

Moreover, in view of how the purported summary is now also being misused in the other reexaminations, the response at hand actually should have been held noncompliant. In the future, patent owner must comply with 37 CFR 1.565.

Response to Arguments

Response to Summary of Interview disclosed on pages 2-5 of the remarks filed on November 4th, 2020.

ISSUE I: Firstly, on page 2, the Patent Owner alleges that "At the interview, it was confirmed that the only reason the obviousness-type double patenting rejection was requested and made was the improper reliance on the '621 Patent and '626 Patent having different expiration dates due to statutory-authorized Patent Term Adjustment ("PTA").

The Examiner disagrees with this allegation. The reason why Obvious Type Double Patenting rejection has been raised is because this application has been ordered for the reexamination as a result of the ex parte reexamination request filed on February 19th, 2020. After further consideration, the Examiner concluded that claims of the US Patent No. 7,002,621 and US Patent No. 6,452,626 are essentially directed

to the same invention and therefore the Obvious Type Double Patenting rejection was warranted. This decision was not made only because '621 Patent and '626 Patent are having different expiration dates due to PTA, as the Patent Owner alleges.

Furthermore, on page 3 of the remarks, the Patent Owner alleges that since Examiner Rao did not raise obvious type double patenting rejection after conducting interference search, no substantial new question of patentability is raised by the obvious type double patenting rejection – that issue was already considered during original prosecution of the '626 Patent. The Examiners did not discuss Mr. Rao's action in the interview because previous prosecution does not affect current reexamination proceeding and as mentioned in the previous paragraph the substantial new question has been determined to exist and appropriate Obvious Type Double Patenting rejection has been applied.

Furthermore MPEP 2216 clearly recites:

“After the enactment of the Patent and Trademark Office Authorization Act of 2002 (“the 2002 Act”), a substantial new question of patentability can be raised by patents and printed publications “previously cited by or to the Office or considered by the Office” (“old art”). The 2002 Act did not negate the statutory requirement for a substantial new question of patentability that requires raising new questions about pre-existing technology. In the implementation of the 2002 Act, MPEP § 2242, subsection II.A. was revised. The revision permits raising a substantial new question of patentability based solely on old art, but only if the old art is “presented/viewed in a new light, or in a different way, as compared with its use in the

earlier examination(s), in view of a material new argument or interpretation presented in the request”.

Thus, even though interference search was conducted by Examiner Rao, it does not bar SNQ from being instituted for ‘626 Patent, because there is no clear indication that Examiner Rao considered ‘626 patent in the same light.

ISSUE II: On page 7 of the remarks, the Patent Owner contends “Patent Owner respectfully submits that the record is completely devoid of any “unjustified or improper timewise extension,” and the Office Action fails to identify any acts by Patent Owner to support such an allegation. Obviousness-type double patenting is a judicial doctrine that arose based on the principle of preventing unfair extensions of patent term, which is not at issue here. Moreover, the Federal Circuit in *Novartis AG v. Ezra Ventures LLC*, 909 F.3d 1367, 1373-75 (Fed. Cir. 2018) squarely addressed the interplay of the issues here - obviousness-type double patenting versus a statutory grant of additional patent term - and ruled that obviousness-type double patenting does not apply in this circumstance. *Id.* at 1373-75; see also MPEP § 804.05”.

Response to Argument: The Examiner did not find the above argument persuasive. First of all, this case is not akin to *Novartis v. Ezra*, because that case dealt with Novartis **unexpired** ‘229 patent. In the case at hand, the subject patent is expired for failure to pay the [11.5 year] maintenance fees due, and it appears that patent owner declined to avail itself of the entire adjustment, which might have been available for the patent being reexamined. Accordingly, patent owner has not, and cannot, provide timeline(s) where the

subject patent(s) statuses are congruent with the case, which patent owner purports should control here. Alternatively, to the extent that patent owner feels that there was no ‘improper extension’ here because it declined to pay its maintenance fees, patent owner is invited to present precedential case law, which actually stands for that principal, as the examiners don’t believe, that there is such.

In addition, the Examiner would also like to note that *Novartis AG v. Ezra Ventures LLC*, 909 F.3d 1367, 1373-75 (Fed Cir. 2008) pertained to Patent Time Extension (PTE) and not to Patent Time Adjustment (PTA). In this case, ‘621 Patent was not given PTE but PTA and since those time adjustments are calculated in a very different manner and are based on different circumstances, the court ruling in *Novartis* case is not congruent with the outstanding circumstances of the current case.

ISSUE III. Also on pages 7 and 8, the Patent Owner further submits “*No obviousness-type double patenting rejection was issued against the ‘621 Patent, as would have been issued pursuant to standard Patent Office procedures if Examiner Rao believed that such a rejection was warranted. See Spar Deck K 31, Indeed, Examiner Rao issued an obviousness-type double patenting rejection in the parent ‘255 Patent (over the ‘839 Patent) and a terminal disclaimer was filed, but Examiner Rao did not do so in the ‘621 Patent. Accordingly, no terminal disclaimer was necessary, nor filed, during prosecution of the ‘621 Patent or the ‘626 Patent. See id. 31-22. As a result, the ‘621 Patents were entitled to receive PTA awarded by the Patent Office. 35 U.S.C. § 154*”.

Response to Argument: The Examiner would like to note that each case is treated individually on its merits. More specifically, Substantial New Question of Patentability can be found even if a reference has already been considered as long it is viewed in a different light (See MPEP 2216). In this instance, the requester proposed Obvious Type Double Patenting rejection citing admitted prior art to show that slight difference in the claimed invention would have been obvious to one of ordinary skill in the art. There is no evidence which would suggest that Examiner Rao considered those combinations as well. However in the current prosecution, the Examiner concluded that based on the submitted request, content of the '626 patent and the secondary prior art, the Obvious Type Double Patenting rejection is proper.

ISSUE IV: *Then on page 9, the Patent Owner contends "It appears that the Office was led astray in issuing the obviousness-type double patenting rejections by the Request for Ex Parte Reexamination itself - which set forth an erroneous explanation of the legal standards for ordering reexamination based on obviousness-type double patenting. See Request at 15-18. In particular, the Request cites several cases as authority for making an obviousness-type double patenting rejection of the '621 Patent over the '626 Patent, but notably omits the most pertinent and recent decision from the Federal Circuit in Novartis".*

Response to Argument: The Examiner disagrees with the above argument. First of all, as mentioned above each application is treated individually on its merits due to its unique nature. Also as explained above Novartis decision is not pertinent here for at least two reasons. First Patent in review in Novartis

case was not expired in contrast to current case, wherein Patent Owner failed to pay maintenance fee at 11.5 year mark and second, Novartis was concerned with PTE and not PTA, which as explained above, are different standards for calculating and awarding time extension. Consequently, for at least those two reasons Novartis case is a not governing precedence in this instance.

*ISSUE V: On pages 9 and 10, the Patent Owner also alleged the following “Patent Owner respectfully submits that the holding of Novartis does not turn on any differences between PTE and PTA. The discussion of the differences between PTE and PTA in Novartis is made in connection with the court’s discussion of its decision in Merck & Co. v. HiTech Pharmacal Co., 482 F.3d 1317 (Fed. Cir. 2007). The Novartis court explained that the “Delaware District Court concluded that, in accordance with statutory construction principles and as a logical extension of this court’s holding in Merck & Co. v. Hi-Tech Pharmacal Co., 482 F.3d 1317 (Fed. Cir. 2007), obviousness-type double patenting does not invalidate an otherwise validly obtained PTE under 35 U.S.C. § 156. We agree and accordingly affirm.” Novartis, 909 F.3d at 1373-74. The Merck decision involved whether PTE could be applied to a terminally disclaimed patent, even where the terminal disclaimer overcame an obviousness-type double patenting rejection . . . When the Federal Circuit explained the policy of obviousness-type double patenting, however, and not whether a particular patent was entitled to receive a change in patent term, **the Federal Circuit did not focus on any differences between PTE or PTA**, but rather explained more generally that the judge-made doctrine of obviousness-type double patenting would not cut off a statutorily-*

authorized time extension. Novartis, 909 F.3d at 1375. Statutorily-authorized time extensions include PTE and PTA. This exact reasoning applies here as well. Applying obviousness-type double patenting to invalidate a patent over a related patent having the same priority claim, but a different expiration date arising solely based on a statutorily-authorized patent term adjustments, would elevate the judicially created double patenting doctrine over the statutory grant of PTA - exactly what the Federal Circuit said is improper in Novartis”.

Response to Argument: The above argument is not found persuasive. As explained in response to arguments above, Novartis does not pertain to the current circumstances as it was related to PTE and not PT A Patent Owner stated that “the Federal Circuit did not focus on any differences between PTE or PTA”, and that is probably because the case pertained to PTE and there was not need to discuss PTA, but it is important to note that Federal Court did not state that those two time adjustments should be treated the same in reference to terminal disclaimer. Neither did the Federal Circuit Court pointed out any similarities between PT A and PTE. Hence, Patent Owner’s allegations that PTA and PTE should be treated the same are unsupported. Furthermore, Patent Time Extension calculation and conditions under which it may be awarded are listed in 35 U.S.C 156. On the other hand, Patent Time Adjustment is discussed in section 35 U.S.C. 154 and 154(b)(2)(B) clearly recites

- (2) LIMITATIONS.—
 - (A) IN GENERAL.— To the extent that periods of delay attributable to grounds

specified in paragraph (1) overlap, the period of any adjustment granted under this subsection shall not exceed the actual number of days the issuance of the patent was delayed.

- (B) DISCLAIMED TERM.— No patent the term of which has been disclaimed beyond a specified date may be adjusted under this section beyond the expiration date specified in the disclaimer.

It is noted that Obvious Type Double Patenting rejection has not been raised prior to this reexamination proceeding, however since this rejection is raised now, based on the citation above, PTA should not be applied because “*No patent the term of which has been disclaimed beyond a specified date may be adjusted under this section beyond the expiration date specified in the disclaimer*”.

Moreover, as mentioned above, US Patent 7,002,621 has expired on February 21st, 2018 due to non-payment of the maintenance fee. Accordingly, even if PT A would be applied, it would be forfeited by the Patent Owner for failure to pay the maintenance fees.

ISSUE VI: Then on page 12, Patent Owner further contends “The only reason the Federal Circuit distinguished PTE from PTA in Novartis was because a terminal disclaimer was filed in the Novartis ’413 Patent, and by statute a terminal disclaimer cuts-off additional term under PTA, but not PTE. In other words, the distinction raised in Novartis and relied upon by the Examiners at the interview only affects when additional term may be granted, not whether obviousness-type double patenting can render a claim

invalid for PTA. See Novartis, 909 F.3d at 1373-74 . . . For the same reasoning in Novartis that obviousness-type double patenting did not apply to a patent subject to a statutory grant of additional patent term which created different expiration dates (and purportedly opened the door to a double patenting rejection), obviousness-type double patenting does not apply here where statutory grants of additional patent term solely account for the different expiration dates of the '621 Patent and the '626 Patent. These statutory grants of additional patent term to the '621 and '626 Patents cannot be the basis to open the door to a double patenting rejection”.

Response to Argument: The Examiner does not agree with the Patent Owner’s allegation. As noted above Novartis pertains to PTE not PTA. Furthermore, if the double patenting would be applied earlier in the prosecution of the ‘621 patent, the PTA would not be granted based on 35 U.S.C. 154(b)(2)(B). Upon filing of the ex-parte reexamination request, the Examiner has considered the language of claims of the ‘621 patent in view of the claims recited in ‘626 patent and admitted prior art, and concluded that the Non-Statutory Double Patenting rejection is proper. Consequently, in accord with MPEP, the term of the ‘621 patent should not extend beyond the term of the ‘626 patent. In addition, ‘621 patent has expired on February 21st, 2018 regardless of previously awarded PTA, for failure to pay maintenance fee at 11.5 year mark.

ISSUE VII: *On pages 13-16, Patent Owner argues that “As noted above, the Request for Ex Parte Reexamination set forth an erroneous explanation of the legal standards for ordering reexamination based*

on double patenting, relied on several inapposite cases, and omitted the most pertinent and recent decision from the Federal Circuit in Novartis”.

Response to Argument: The Examiner did not find the above argument persuasive. As recited in the MPEP 2209:

“The basic characteristics of ex parte reexamination are as follows:

- (A) Anyone can request reexamination at any time during the period of enforceability of the patent;
- (B) In *ex parte* reexaminations ordered under **35 U.S.C. 304**, prior art considered during reexamination is limited to prior art patents or printed publications applied under the appropriate parts of **35 U.S.C. 102** and **103**. **Patents may also be applied in a double patenting rejection as discussed in MPEP § 2258**”

Accordingly, double patenting rejection, per MPEP, constitutes proper grounds for instituting Substantial New Question of Patentability. Furthermore, the Examiner has considered *Novartis, AbbVie Inc vs Mathilda and Gilead Scis., Inc v. Natco Pharma* and it has been concluded that based on the provided prior art and the request, Substantial New Question of Patentability has been warranted. Furthermore, the Examiner is aware that expiration of ‘621 and ‘626 patents differs by the amount of 759 days which was a result of Patent Time Adjustment. However 35 U.S.C. 154(b)(2)(B) states that

“No patent the term of which has been disclaimed beyond a specified date may be adjusted under this

section beyond the expiration date specified in the disclaimer”, thus if there is an outstanding Non-Statutory Double Patenting rejection, the PTA should not be granted.

Moreover, as noted above, ‘621 patent has expired on February 21st, 2018 due to non-payment of the maintenance fee, therefore even if the PTA would be rightfully granted, the Patent Owner would forfeit this extension by not paying the maintenance fee.

ISSUE VIII. Then on page 17, the Patent Owner alleges “An additional reason that obviousness-type double patenting is an improper rejection in this ex parte reexamination is that this issue was considered previously during prosecution. As explained above and illustrated in the timeline, Examiner Rao conducted an interference search in the ‘621 Patent prosecution and in the ‘626 Patent prosecution as required by MPEP § 2304.01(a) . . . As explained in the accompanying declaration of former Patent Office Director of the Office of Patent Legal Administration Robert Spar, an obviousness-type double patenting rejection would have been issued against the ‘621 Patent or the ‘626 Patent pursuant to standard Patent Office procedures if Examiner Rao believed that such a rejection was warranted.”

Response to Argument: The Examiner disagrees with the above allegation. This argument has already been addressed above in response to ISSUE III. In addition, the Examiner would also like to note that the decision about whether the Obvious Type Double Patenting rejection should be made must not be based on speculation about what Examiner Rao thought and considered. Just because he raised Double Patenting rejection in the parent ‘255 patent does not preclude

'621 patent from having the same type of rejection. The request for the ex-parte reexamination has been filed and claims in the '621 and '626 patents have been compared. In addition admitted prior art in the '621 patent has also been considered (see column 4, line 65 to column 5, line 35 and column 8, lines 17-20). Based on the admitted prior art and the claim comparison, the Examiner concluded that the rejection is proper and is warranted.

***NOTICE RE PATENT OWNER'S
CORRESPONDENCE ADDRESS***

Effective May 16, 2007, 37 CFR 1.33(c) has been revised to provide that: The Patent owner's correspondence address for all communications in an ex parte reexamination or an **inter partes** reexamination is designated as the correspondence address of the patent.

Revisions and Technical Corrections Affecting Requirements for Ex Parte and Inter Partes Reexamination, 72 FR 18892 (April, 16, 2007) (Final Rule)

The correspondence address for any pending reexamination proceeding not having the same correspondence address as that of the patent is, by way of this revision to 37 CFR 1.33(c), automatically changed to that of the patent file as of the effective date.

This change is effective for any reexamination proceeding which is pending before the Office as of May 16, 2007, including the present reexamination proceeding, and to any reexamination proceeding which is filed after that date.

Parties are to take this change into account when filing papers, and direct communications accordingly.

In the event the patent owner's correspondence address listed in the papers (record) for the present proceeding is different from the correspondence address of the patent, it is strongly encouraged that the patent owner affirmatively file a Notification of Change of Correspondence Address in the reexamination proceeding and/or the patent (depending on which address patent owner desires), to conform the address of the proceeding with that of the patent and to clarify the record as to which address should be used for correspondence.

Telephone Numbers for reexamination inquiries:

Reexamination	(571) 272-7703
Central Reexam Unit (CRU)	(571) 272-7705
Reexamination Facisimile Transmission No.	(571) 273-9900

Conclusion

Claims 25-29 and 33 are rejected due to Obviousness-Type Double Patenting over claims 52, 56 and 61 of the '626 Patent .

Extensions of Time

Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extension of time in reexamination proceedings are provided for in 37 CFR 1.550(c). After the filing of a request for

reexamination by a third party requester, any document filed by either the patent owner of the third party requester must be served on the other party (or parties where two or more third-party-requester proceedings are merged) in the reexamination proceeding in the manner provided in 37 CFR 1.248. See 37 CFR 1.550(f).

Litigation Reminder

The patent owner is reminded of the continued responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, throughout the course of this reexamination proceeding. The third party requester is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP § 2207, 2282 and 2286.

All correspondence relating to this *ex parte* reexamination proceeding should be directed:

By EFS-Web: Registered Users may submit correspondence via EFS-Web, at <https://efs.uspto.gov/efile/myportal/efs-registered>.

By Mail to: Mail Stop *Ex Parte* Reexam
Central Reexamination Unit
Commissioner for Patents
United States Patent & Trademark
Office
P.O. Box 1450
Alexandria VA 22313-1450

By FAX to: (571)273-9900
Central Reexamination Unit

311a

By hand: Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

EFS-Web offers the benefit of quick submission to the particular area of the Office that needs to act on the correspondence. Also, EFS-Web submissions are "soft-scanned" (i.e., electronically uploaded) directly into the official file for the reexamination proceeding, which offers parties the opportunity to review the content of their submission after the "soft scanning" process is complete.

Any inquiry concerning this communication should be directed to the Central Reexamination Unit at telephone number 571-272-7705.

/ANGELA M LIE/
Primary Examiner, Art Unit 3992

Conferees:

/Ovidio Escalante/
Primary Examiner, Art Unit 3992

/M.F/
Supervisory Patent Examiner, Art Unit 3992

APPENDIX J

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

Nos. 2022-1293, 2022-1294,
2022-1295, 2022-1296

IN RE: CELLECT, LLC, APPELLANT

Entered: Jan. 19, 2024

Appeals from the United States
Patent and Trademark Office, Patent
Trial and Appeal Board
in Nos. 90/014,453, 90/014,454,
90/014,455, 90/014,457

ON PETITION FOR REHEARING EN BANC

Before MOORE, *Chief Judge*, LOURIE, DYK, PROST,
REYNA, TARANTO, CHEN, HUGHES, STOLL,
CUNNINGHAM, and STARK, *Circuit Judges*.

PER CURIAM.¹

¹ Circuit Judge Newman did not participate.

ORDER

Collect, LLC filed a petition for rehearing en banc. A response to the petition was invited by the court and filed by Katherine K. Vidal.

Robert Allen Armitage, American Intellectual Property Law Association, AbbVie Inc. and Innovation Alliance, Pharmaceutical Research and Manufacturers of America, Biocom California and Biotechnology Innovation Organization, Novartis Pharmaceuticals Corporation, Intellectual Property Owners Association, Language Technologies, Inc., Parus Holdings, Inc. and Robocast, Inc., Amgen Inc., Association of University Technology Managers, Astra-Zeneca Pharmaceuticals LP, Johnson & Johnson, Merck Sharp & Dohme, LLC and Novo Nordisk Inc, New York Intellectual Property Law Association, and Inari Agriculture, Inc. requested leave to file briefs as amici curiae which the court granted.

The petition was first referred as a petition to the panel that heard the appeal, and thereafter the petition was referred to the circuit judges who are in regular active service.

Upon consideration thereof,

IT IS ORDERED THAT:

The petition for panel rehearing is denied.

The petition for rehearing en banc is denied.

314a

The mandate of the court will issue January 26,
2024.

FOR THE COURT
/s/ Jarrett B. Perlow
Jarrett B. Perlow
Clerk of Court

January 19, 2024
Date

APPENDIX K

35 U.S.C. § 154

§ 154. Contents and term of patent; provisional rights

(a) In General.—

(1) Contents.—Every patent shall contain a short title of the invention and a grant to the patentee, his heirs or assigns, of the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States, and, if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States, or importing into the United States, products made by that process, referring to the specification for the particulars thereof.

(2) Term.—Subject to the payment of fees under this title, such grant shall be for a term beginning on the date on which the patent issues and ending 20 years from the date on which the application for the patent was filed in the United States or, if the application contains a specific reference to an earlier filed application or applications under section 120, 121, 365(c), or 386(c), from the date on which the earliest such application was filed.

(3) Priority.—Priority under section 119, 365(a), 365(b), 386(a), or 386(b) shall not be taken into account in determining the term of a patent.

(4) Specification and drawing.—A copy of the specification and drawing shall be annexed to the patent and be a part of such patent.

(b) Adjustment of Patent Term.—

(1) Patent term guarantees.—

(A) Guarantee of prompt Patent and Trademark Office responses.—Subject to the limitations under paragraph (2), if the issue of an original patent is delayed due to the failure of the Patent and Trademark Office to—

(i) provide at least one of the notifications under section 132 or a notice of allowance under section 151 not later than 14 months after—

(I) the date on which an application was filed under section 111(a); or

(II) the date of commencement of the national stage under section 371 in an international application;

(ii) respond to a reply under section 132, or to an appeal taken under section 134, within 4 months after the date on which the reply was filed or the appeal was taken;

(iii) act on an application within 4 months after the date of a decision by the Patent Trial and Appeal Board under section 134 or 135 or a decision by a Federal court under section 141, 145, or 146 in a case in which allowable claims remain in the application; or

(iv) issue a patent within 4 months after the date on which the issue fee was paid under

section 151 and all outstanding requirements were satisfied,

the term of the patent shall be extended 1 day for each day after the end of the period specified in clause (i), (ii), (iii), or (iv), as the case may be, until the action described in such clause is taken.

(B) Guarantee of no more than 3-year application pendency.—Subject to the limitations under paragraph (2), if the issue of an original patent is delayed due to the failure of the United States Patent and Trademark Office to issue a patent within 3 years after the actual filing date of the application under section 111(a) in the United States or, in the case of an international application, the date of commencement of the national stage under section 371 in the international application, not including—

(i) any time consumed by continued examination of the application requested by the applicant under section 132(b);

(ii) any time consumed by a proceeding under section 135(a), any time consumed by the imposition of an order under section 181, or any time consumed by appellate review by the Patent Trial and Appeal Board or by a Federal court; or

(iii) any delay in the processing of the application by the United States Patent and Trademark Office requested by the applicant except as permitted by paragraph (3)(C),

the term of the patent shall be extended 1 day for each day after the end of that 3-year period until the patent is issued.

(C) Guarantee of adjustments for delays due to derivation proceedings, secrecy orders, and appeals.—Subject to the limitations under paragraph (2), if the issue of an original patent is delayed due to—

- (i) a proceeding under section 135(a);
- (ii) the imposition of an order under section 181; or
- (iii) appellate review by the Patent Trial and Appeal Board or by a Federal court in a case in which the patent was issued under a decision in the review reversing an adverse determination of patentability,

the term of the patent shall be extended 1 day for each day of the pendency of the proceeding, order, or review, as the case may be.

(2) Limitations.—

(A) In general.—To the extent that periods of delay attributable to grounds specified in paragraph (1) overlap, the period of any adjustment granted under this subsection shall not exceed the actual number of days the issuance of the patent was delayed.

(B) Disclaimed term.—No patent the term of which has been disclaimed beyond a specified date may be adjusted under this section beyond the expiration date specified in the disclaimer.

(C) Reduction of period of adjustment.—

(i) The period of adjustment of the term of a patent under paragraph (1) shall be reduced by a period equal to the period of time during which the applicant failed to engage in reasonable efforts to conclude prosecution of the application.

(ii) With respect to adjustments to patent term made under the authority of paragraph (1)(B), an applicant shall be deemed to have failed to engage in reasonable efforts to conclude processing or examination of an application for the cumulative total of any periods of time in excess of 3 months that are taken to respond to a notice from the Office making any rejection, objection, argument, or other request, measuring such 3-month period from the date the notice was given or mailed to the applicant.

(iii) The Director shall prescribe regulations establishing the circumstances that constitute a failure of an applicant to engage in reasonable efforts to conclude processing or examination of an application.

(3) Procedures for patent term adjustment determination.—

(A) The Director shall prescribe regulations establishing procedures for the application for and determination of patent term adjustments under this subsection.

(B) Under the procedures established under subparagraph (A), the Director shall—

(i) make a determination of the period of any patent term adjustment under this subsection, and shall transmit a notice of that determination no later than the date of issuance of the patent; and

(ii) provide the applicant one opportunity to request reconsideration of any patent term adjustment determination made by the Director.

(C) The Director shall reinstate all or part of the cumulative period of time of an adjustment under paragraph (2)(C) if the applicant, prior to the issuance of the patent, makes a showing that, in spite of all due care, the applicant was unable to respond within the 3-month period, but in no case shall more than three additional months for each such response beyond the original 3-month period be reinstated.

(D) The Director shall proceed to grant the patent after completion of the Director's determination of a patent term adjustment under the procedures established under this subsection, notwithstanding any appeal taken by the applicant of such determination.

(4) Appeal of patent term adjustment determination.—

(A) An applicant dissatisfied with the Director's decision on the applicant's request for reconsideration under paragraph (3)(B)(ii) shall have exclusive remedy by a civil action against the Director filed in the United States District Court for the Eastern District of Virginia within 180 days after the date of the Director's decision on the applicant's request

for reconsideration. Chapter 7 of title 5 shall apply to such action. Any final judgment resulting in a change to the period of adjustment of the patent term shall be served on the Director, and the Director shall thereafter alter the term of the patent to reflect such change.

(B) The determination of a patent term adjustment under this subsection shall not be subject to appeal or challenge by a third party prior to the grant of the patent.

(c) Continuation.—

(1) Determination.—The term of a patent that is in force on or that results from an application filed before the date that is 6 months after the date of the enactment of the Uruguay Round Agreements Act shall be the greater of the 20-year term as provided in subsection (a), or 17 years from grant, subject to any terminal disclaimers.

(2) Remedies.—The remedies of sections 283, 284, and 285 shall not apply to acts which—

(A) were commenced or for which substantial investment was made before the date that is 6 months after the date of the enactment of the Uruguay Round Agreements Act; and

(B) became infringing by reason of paragraph (1).

(3) Remuneration.—The acts referred to in paragraph (2) may be continued only upon the payment of an equitable remuneration to the patentee that is determined in an action brought under chapter 28 and chapter 29 (other than those provisions excluded by paragraph (2)).

(d) Provisional Rights.—

(1) In general.—In addition to other rights provided by this section, a patent shall include the right to obtain a reasonable royalty from any person who, during the period beginning on the date of publication of the application for such patent under section 122(b), or in the case of an international application filed under the treaty defined in section 351(a) designating the United States under Article 21(2)(a) of such treaty or an international design application filed under the treaty defined in section 381(a)(1) designating the United States under Article 5 of such treaty, the date of publication of the application, and ending on the date the patent is issued—

(A)(i) makes, uses, offers for sale, or sells in the United States the invention as claimed in the published patent application or imports such an invention into the United States; or

(ii) if the invention as claimed in the published patent application is a process, uses, offers for sale, or sells in the United States or imports into the United States products made by that process as claimed in the published patent application; and

(B) had actual notice of the published patent application and, in a case in which the right arising under this paragraph is based upon an international application designating the United States that is published in a language other than English, had a translation of the international application into the English language.

(2) Right based on substantially identical inventions.—The right under paragraph (1) to obtain a reasonable royalty shall not be available under this subsection unless the invention as claimed in the patent is substantially identical to the invention as claimed in the published patent application.

(3) Time limitation on obtaining a reasonable royalty.—The right under paragraph (1) to obtain a reasonable royalty shall be available only in an action brought not later than 6 years after the patent is issued. The right under paragraph (1) to obtain a reasonable royalty shall not be affected by the duration of the period described in paragraph (1).

(4) Requirements for international applications.--

(A) Effective date.—The right under paragraph (1) to obtain a reasonable royalty based upon the publication under the treaty defined in section 351(a) of an international application designating the United States shall commence on the date of publication under the treaty of the international application, or, if the publication under the treaty of the international application is in a language other than English, on the date on which the Patent and Trademark Office receives a translation of the publication in the English language.

(B) Copies.—The Director may require the applicant to provide a copy of the international application and a translation thereof.

APPENDIX L

35 U.S.C. § 156

§ 156. Extension of patent term

(a) The term of a patent which claims a product, a method of using a product, or a method of manufacturing a product shall be extended in accordance with this section from the original expiration date of the patent, which shall include any patent term adjustment granted under section 154(b), if—

- (1) the term of the patent has not expired before an application is submitted under subsection (d)(1) for its extension;
- (2) the term of the patent has never been extended under subsection (e)(1) of this section;
- (3) an application for extension is submitted by the owner of record of the patent or its agent and in accordance with the requirements of paragraphs (1) through (4) of subsection (d);
- (4) the product has been subject to a regulatory review period before its commercial marketing or use;
- (5)(A) except as provided in subparagraph (B) or (C), the permission for the commercial marketing or use of the product after such regulatory review period is the first permitted commercial marketing or use of the product under the provision of law under which such regulatory review period occurred;

(B) in the case of a patent which claims a method of manufacturing the product which primarily uses recombinant DNA technology in the manufacture of the product, the permission for the commercial marketing or use of the product after such regulatory review period is the first permitted commercial marketing or use of a product manufactured under the process claimed in the patent; or

(C) for purposes of subparagraph (A), in the case of a patent which—

(i) claims a new animal drug or a veterinary biological product which (I) is not covered by the claims in any other patent which has been extended, and (II) has received permission for the commercial marketing or use in non-food-producing animals and in food-producing animals, and

(ii) was not extended on the basis of the regulatory review period for use in non-food-producing animals,

the permission for the commercial marketing or use of the drug or product after the regulatory review period for use in food-producing animals is the first permitted commercial marketing or use of the drug or product for administration to a food-producing animal.

The product referred to in paragraphs (4) and (5) is hereinafter in this section referred to as the “approved product”.

(b) Except as provided in subsection (d)(5)(F), the rights derived from any patent the term of which is

extended under this section shall during the period during which the term of the patent is extended—

(1) in the case of a patent which claims a product, be limited to any use approved for the product—

(A) before the expiration of the term of the patent—

(i) under the provision of law under which the applicable regulatory review occurred, or

(ii) under the provision of law under which any regulatory review described in paragraph (1), (4), or (5) of subsection (g) occurred, and

(B) on or after the expiration of the regulatory review period upon which the extension of the patent was based;

(2) in the case of a patent which claims a method of using a product, be limited to any use claimed by the patent and approved for the product—

(A) before the expiration of the term of the patent—

(i) under any provision of law under which an applicable regulatory review occurred, and

(ii) under the provision of law under which any regulatory review described in paragraph (1), (4), or (5) of subsection (g) occurred, and

(B) on or after the expiration of the regulatory review period upon which the extension of the patent was based; and

(3) in the case of a patent which claims a method of manufacturing a product, be limited to the method of manufacturing as used to make—

(A) the approved product, or

(B) the product if it has been subject to a regulatory review period described in paragraph (1), (4), or (5) of subsection (g).

As used in this subsection, the term “product” includes an approved product.

(c) The term of a patent eligible for extension under subsection (a) shall be extended by the time equal to the regulatory review period for the approved product which period occurs after the date the patent is issued, except that—

(1) each period of the regulatory review period shall be reduced by any period determined under subsection (d)(2)(B) during which the applicant for the patent extension did not act with due diligence during such period of the regulatory review period;

(2) after any reduction required by paragraph (1), the period of extension shall include only one-half of the time remaining in the periods described in paragraphs (1)(B)(i), (2)(B)(i), (3)(B)(i), (4)(B)(i), and (5)(B)(i) of subsection (g);

(3) if the period remaining in the term of a patent after the date of the approval of the approved product under the provision of law under which such regulatory review occurred when added to the regulatory review period as revised under paragraphs (1) and (2) exceeds fourteen years, the period of extension shall be reduced so that the total of both such periods does not exceed fourteen years; and

(4) in no event shall more than one patent be extended under subsection (e)(1) for the same regulatory review period for any product.

(d)(1) To obtain an extension of the term of a patent under this section, the owner of record of the patent or its agent shall submit an application to the Director. Except as provided in paragraph (5), such an application may only be submitted within the sixty-day period beginning on the date the product received permission under the provision of law under which the applicable regulatory review period occurred for commercial marketing or use, or in the case of a drug product described in subsection (i), within the sixty-day period beginning on the covered date (as defined in subsection (i)). The application shall contain—

(A) the identity of the approved product and the Federal statute under which regulatory review occurred;

(B) the identity of the patent for which an extension is being sought and the identity of each claim of such patent which claims the approved product or a method of using or manufacturing the approved product;

(C) information to enable the Director to determine under subsections (a) and (b) the eligibility of a patent for extension and the rights that will be derived from the extension and information to enable the Director and the Secretary of Health and Human Services or the Secretary of Agriculture to determine the period of the extension under subsection (g);

(D) a brief description of the activities undertaken by the applicant during the applicable regulatory review period with respect to the approved product

and the significant dates applicable to such activities; and

(E) such patent or other information as the Director may require.

For purposes of determining the date on which a product receives permission under the second sentence of this paragraph, if such permission is transmitted after 4:30 P.M., Eastern Time, on a business day, or is transmitted on a day that is not a business day, the product shall be deemed to receive such permission on the next business day. For purposes of the preceding sentence, the term “business day” means any Monday, Tuesday, Wednesday, Thursday, or Friday, excluding any legal holiday under section 6103 of title 5.

(2)(A) Within 60 days of the submittal of an application for extension of the term of a patent under paragraph (1), the Director shall notify—

(i) the Secretary of Agriculture if the patent claims a drug product or a method of using or manufacturing a drug product and the drug product is subject to the Virus-Serum-Toxin Act, and

(ii) the Secretary of Health and Human Services if the patent claims any other drug product, a medical device, or a food additive or color additive or a method of using or manufacturing such a product, device, or additive and if the product, device, and additive are subject to the Federal Food, Drug, and Cosmetic Act,

of the extension application and shall submit to the Secretary who is so notified a copy of the application. Not later than 30 days after the receipt of an

application from the Director, the Secretary receiving the application shall review the dates contained in the application pursuant to paragraph (1)(C) and determine the applicable regulatory review period, shall notify the Director of the determination, and shall publish in the Federal Register a notice of such determination.

(B)(i) If a petition is submitted to the Secretary making the determination under subparagraph (A), not later than 180 days after the publication of the determination under subparagraph (A), upon which it may reasonably be determined that the applicant did not act with due diligence during the applicable regulatory review period, the Secretary making the determination shall, in accordance with regulations promulgated by such Secretary, determine if the applicant acted with due diligence during the applicable regulatory review period. The Secretary making the determination shall make such determination not later than 90 days after the receipt of such a petition. For a drug product, device, or additive subject to the Federal Food, Drug, and Cosmetic Act or the Public Health Service Act, the Secretary may not delegate the authority to make the determination prescribed by this clause to an office below the Office of the Director¹ of Food and Drugs. For a product subject to the Virus-Serum-Toxin Act, the Secretary of Agriculture may not delegate the authority to make the determination prescribed by this clause to an office below the Office of the Assistant Secretary for Marketing and Inspection Services.

¹ So in original. Probably should be "Commissioner".

(ii) The Secretary making a determination under clause (i) shall notify the Director of the determination and shall publish in the Federal Register a notice of such determination together with the factual and legal basis for such determination. Any interested person may request, within the 60-day period beginning on the publication of a determination, the Secretary making the determination to hold an informal hearing on the determination. If such a request is made within such period, such Secretary shall hold such hearing not later than 30 days after the date of the request, or at the request of the person making the request, not later than 60 days after such date. The Secretary who is holding the hearing shall provide notice of the hearing to the owner of the patent involved and to any interested person and provide the owner and any interested person an opportunity to participate in the hearing. Within 30 days after the completion of the hearing, such Secretary shall affirm or revise the determination which was the subject of the hearing and shall notify the Director of any revision of the determination and shall publish any such revision in the Federal Register.

(3) For the purposes of paragraph (2)(B), the term “due diligence” means that degree of attention, continuous directed effort, and timeliness as may reasonably be expected from, and are ordinarily exercised by, a person during a regulatory review period.

(4) An application for the extension of the term of a patent is subject to the disclosure requirements prescribed by the Director.

(5)(A) If the owner of record of the patent or its agent reasonably expects that the applicable regulatory

review period described in paragraph (1)(B)(ii), (2)(B)(ii), (3)(B)(ii), (4)(B)(ii), or (5)(B)(ii) of subsection (g) that began for a product that is the subject of such patent may extend beyond the expiration of the patent term in effect, the owner or its agent may submit an application to the Director for an interim extension during the period beginning 6 months, and ending 15 days, before such term is due to expire. The application shall contain—

- (i) the identity of the product subject to regulatory review and the Federal statute under which such review is occurring;
- (ii) the identity of the patent for which interim extension is being sought and the identity of each claim of such patent which claims the product under regulatory review or a method of using or manufacturing the product;
- (iii) information to enable the Director to determine under subsection (a)(1), (2), and (3) the eligibility of a patent for extension;
- (iv) a brief description of the activities undertaken by the applicant during the applicable regulatory review period to date with respect to the product under review and the significant dates applicable to such activities; and
- (v) such patent or other information as the Director may require.

(B) If the Director determines that, except for permission to market or use the product commercially, the patent would be eligible for an extension of the patent term under this section, the Director shall publish in the Federal Register a notice of such determination, including the identity of the

product under regulatory review, and shall issue to the applicant a certificate of interim extension for a period of not more than 1 year.

(C) The owner of record of a patent, or its agent, for which an interim extension has been granted under subparagraph (B), may apply for not more than 4 subsequent interim extensions under this paragraph, except that, in the case of a patent subject to subsection (g)(6)(C), the owner of record of the patent, or its agent, may apply for only 1 subsequent interim extension under this paragraph. Each such subsequent application shall be made during the period beginning 60 days before, and ending 30 days before, the expiration of the preceding interim extension.

(D) Each certificate of interim extension under this paragraph shall be recorded in the official file of the patent and shall be considered part of the original patent.

(E) Any interim extension granted under this paragraph shall terminate at the end of the 60-day period beginning on the date on which the product involved receives permission for commercial marketing or use, except that, if within that 60-day period the applicant notifies the Director of such permission and submits any additional information under paragraph (1) of this subsection not previously contained in the application for interim extension, the patent shall be further extended, in accordance with the provisions of this section—

(i) for not to exceed 5 years from the date of expiration of the original patent term; or

(ii) if the patent is subject to subsection (g)(6)(C), from the date on which the product involved receives approval for commercial marketing or use.

(F) The rights derived from any patent the term of which is extended under this paragraph shall, during the period of interim extension—

(i) in the case of a patent which claims a product, be limited to any use then under regulatory review;

(ii) in the case of a patent which claims a method of using a product, be limited to any use claimed by the patent then under regulatory review; and

(iii) in the case of a patent which claims a method of manufacturing a product, be limited to the method of manufacturing as used to make the product then under regulatory review.

(e)(1) A determination that a patent is eligible for extension may be made by the Director solely on the basis of the representations contained in the application for the extension. If the Director determines that a patent is eligible for extension under subsection (a) and that the requirements of paragraphs (1) through (4) of subsection (d) have been complied with, the Director shall issue to the applicant for the extension of the term of the patent a certificate of extension, under seal, for the period prescribed by subsection (c). Such certificate shall be recorded in the official file of the patent and shall be considered as part of the original patent.

(2) If the term of a patent for which an application has been submitted under subsection (d)(1) would expire before a certificate of extension is issued or denied under paragraph (1) respecting the application, the

Director shall extend, until such determination is made, the term of the patent for periods of up to one year if he determines that the patent is eligible for extension.

(f) For purposes of this section:

(1) The term “product” means:

(A) A drug product.

(B) Any medical device, food additive, or color additive subject to regulation under the Federal Food, Drug, and Cosmetic Act.

(2) The term “drug product” means the active ingredient of—

(A) a new drug, antibiotic drug, or human biological product (as those terms are used in the Federal Food, Drug, and Cosmetic Act and the Public Health Service Act), or

(B) a new animal drug or veterinary biological product (as those terms are used in the Federal Food, Drug, and Cosmetic Act and the Virus-Serum-Toxin Act) which is not primarily manufactured using recombinant DNA, recombinant RNA, hybridoma technology, or other processes involving site specific genetic manipulation techniques,

including any salt or ester of the active ingredient, as a single entity or in combination with another active ingredient.

(3) The term “major health or environmental effects test” means a test which is reasonably related to the evaluation of the health or environmental effects of a product, which requires at least six months to conduct, and the data from which is submitted to receive permission for

commercial marketing or use. Periods of analysis or evaluation of test results are not to be included in determining if the conduct of a test required at least six months.

(4)(A) Any reference to section 351 is a reference to section 351 of the Public Health Service Act.

(B) Any reference to section 503, 505, 512, or 515 is a reference to section 503, 505, 512, or 515 of the Federal Food, Drug, and Cosmetic Act.

(C) Any reference to the Virus-Serum-Toxin Act is a reference to the Act of March 4, 1913 (21 U.S.C. 151-158).

(5) The term “informal hearing” has the meaning prescribed for such term by section 201(y)² of the Federal Food, Drug, and Cosmetic Act.

(6) The term “patent” means a patent issued by the United States Patent and Trademark Office.

(7) The term “date of enactment” as used in this section means September 24, 1984, for a human drug product, a medical device, food additive, or color additive.

(8) The term “date of enactment” as used in this section means the date of enactment of the Generic Animal Drug and Patent Term Restoration Act for an animal drug or a veterinary biological product.

(g) For purposes of this section, the term “regulatory review period” has the following meanings:

(1)(A) In the case of a product which is a new drug, antibiotic drug, or human biological product, the term means the period described in subparagraph

² See References in Text note below.

(B) to which the limitation described in paragraph (6) applies.

(B) The regulatory review period for a new drug, antibiotic drug, or human biological product is the sum of—

(i) the period beginning on the date an exemption under subsection (i) of section 505 or subsection (d) of section 507 became effective for the approved product and ending on the date an application was initially submitted for such drug product under section 351, 505, or 507, and

(ii) the period beginning on the date the application was initially submitted for the approved product under section 351, subsection (b) of section 505, or section 507 and ending on the date such application was approved under such section.

(2)(A) In the case of a product which is a food additive or color additive, the term means the period described in subparagraph (B) to which the limitation described in paragraph (6) applies.

(B) The regulatory review period for a food or color additive is the sum of—

(i) the period beginning on the date a major health or environmental effects test on the additive was initiated and ending on the date a petition was initially submitted with respect to the product under the Federal Food, Drug, and Cosmetic Act requesting the issuance of a regulation for use of the product, and

(ii) the period beginning on the date a petition was initially submitted with respect to the

product under the Federal Food, Drug, and Cosmetic Act requesting the issuance of a regulation for use of the product, and ending on the date such regulation became effective or, if objections were filed to such regulation, ending on the date such objections were resolved and commercial marketing was permitted or, if commercial marketing was permitted and later revoked pending further proceedings as a result of such objections, ending on the date such proceedings were finally resolved and commercial marketing was permitted.

(3)(A) In the case of a product which is a medical device, the term means the period described in subparagraph (B) to which the limitation described in paragraph (6) applies.

(B) The regulatory review period for a medical device is the sum of—

(i) the period beginning on the date a clinical investigation on humans involving the device was begun and ending on the date an application was initially submitted with respect to the device under section 515, and

(ii) the period beginning on the date an application was initially submitted with respect to the device under section 515 and ending on the date such application was approved under such Act or the period beginning on the date a notice of completion of a product development protocol was initially submitted under section 515(f)(5) and ending on the date the protocol was declared completed under section 515(f)(6).

(4)(A) In the case of a product which is a new animal drug, the term means the period described in subparagraph (B) to which the limitation described in paragraph (6) applies.

(B) The regulatory review period for a new animal drug product is the sum of—

(i) the period beginning on the earlier of the date a major health or environmental effects test on the drug was initiated or the date an exemption under subsection (j) of section 512 became effective for the approved new animal drug product and ending on the date an application was initially submitted for such animal drug product under section 512, and

(ii) the period beginning on the date the application was initially submitted for the approved animal drug product under subsection (b) of section 512 and ending on the date such application was approved under such section.

(5)(A) In the case of a product which is a veterinary biological product, the term means the period described in subparagraph (B) to which the limitation described in paragraph (6) applies.

(B) The regulatory period for a veterinary biological product is the sum of—

(i) the period beginning on the date the authority to prepare an experimental biological product under the Virus-Serum-Toxin Act became effective and ending on the date an application for a license was submitted under the Virus-Serum-Toxin Act, and

(ii) the period beginning on the date an application for a license was initially submitted for approval under the Virus-Serum-Toxin Act and ending on the date such license was issued.

(6) A period determined under any of the preceding paragraphs is subject to the following limitations:

(A) If the patent involved was issued after the date of the enactment of this section, the period of extension determined on the basis of the regulatory review period determined under any such paragraph may not exceed five years.

(B) If the patent involved was issued before the date of the enactment of this section and—

(i) no request for an exemption described in paragraph (1)(B) or (4)(B) was submitted and no request for the authority described in paragraph (5)(B) was submitted,

(ii) no major health or environmental effects test described in paragraph (2)(B) or (4)(B) was initiated and no petition for a regulation or application for registration described in such paragraph was submitted, or

(iii) no clinical investigation described in paragraph (3) was begun or product development protocol described in such paragraph was submitted,

before such date for the approved product the period of extension determined on the basis of the regulatory review period determined under any such paragraph may not exceed five years.

(C) If the patent involved was issued before the date of the enactment of this section and if an

action described in subparagraph (B) was taken before the date of the enactment of this section with respect to the approved product and the commercial marketing or use of the product has not been approved before such date, the period of extension determined on the basis of the regulatory review period determined under such paragraph may not exceed two years or in the case of an approved product which is a new animal drug or veterinary biological product (as those terms are used in the Federal Food, Drug, and Cosmetic Act or the Virus-Serum-Toxin Act), three years.

(h) The Director may establish such fees as the Director determines appropriate to cover the costs to the Office of receiving and acting upon applications under this section.

(i)(1) For purposes of this section, if the Secretary of Health and Human Services provides notice to the sponsor of an application or request for approval, conditional approval, or indexing of a drug product for which the Secretary intends to recommend controls under the Controlled Substances Act, beginning on the covered date, the drug product shall be considered to—

(A) have been approved or indexed under the relevant provision of the Public Health Service Act or Federal Food, Drug, and Cosmetic Act; and

(B) have permission for commercial marketing or use.

(2) In this subsection, the term “covered date” means the later of—

(A) the date an application is approved—

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- (i) under section 351(a)(2)(C) of the Public Health Service Act; or
 - (ii) under section 505(b) or 512(c) of the Federal Food, Drug, and Cosmetic Act;
- (B) the date an application is conditionally approved under section 571(b) of the Federal Food, Drug, and Cosmetic Act;
- (C) the date a request for indexing is granted under section 572(d) of the Federal Food, Drug, and Cosmetic Act; or
- (D) the date of issuance of the interim final rule controlling the drug under section 201(j) of the Controlled Substances Act.