

No. _____

IN THE
Supreme Court of the United States

PROVISUR TECHNOLOGIES, INC.,
Petitioner,

v.

WEBER, INC.,
Respondent.

*ON PETITION FOR A WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF
APPEALS FOR THE FEDERAL CIRCUIT*

PETITION FOR A WRIT OF CERTIORARI

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QUESTIONS PRESENTED

Pursuant to 35 U.S.C. § 311(b), a petition for inter partes review (“IPR”) may challenge claims “only on a ground that could be raised under section 102 or 103 and only on the basis of prior art consisting of patents or printed publications.” *Qualcomm Inc. v. Apple Inc.*, 24 F.4th 1367, 1373 (Fed. Cir. 2022). References that constitute prior art because they were in “public use” or “on sale” before the priority date of the challenged claims, 35 U.S.C. § 102(a), were “explicitly excluded” from the grounds that can be raised in IPR. *Qualcomm Inc.*, 24 F.4th at 1376.

The questions presented by the decision below are:

- I. Did the Federal Circuit err by holding that a product manual distributed with an on-sale product necessarily constitutes a printed publication that can be asserted in an IPR, notwithstanding other considerations such as limited distribution, prohibitively high cost, confidentiality restrictions, and industry practice and expectations?
- II. Was the Federal Circuit’s determination that a product manual constitutes a printed publication because it was distributed with an on-sale product consistent with 35 U.S.C. § 311(b), which expressly excludes “on sale” prior art from grounds that may be asserted in inter partes review?

PARTIES TO THE PROCEEDING

Petitioner, which was Appellee below, is Provisur Technologies, Inc. Respondent is Weber, Inc., which was Appellant below.

RULE 29.6 DISCLOSURE STATEMENT

Petitioner Provisur Technologies, Inc. is owned by Provisur S LLC. Provisur S LLC has no parent corporations and no publicly held company owns 10% or more of its stock.

RELATED PROCEEDINGS

Provisur states that the below listed proceedings are directly related to the case in this Court within the meaning of Rule 14.1(b)(iii):

- *Provisur Technologies, Inc. v. Weber, Inc.*, No. 5:19-cv-06021, United States District Court for the Western District of Missouri. Judgment entered October 28, 2022.
- *Provisur Technologies, Inc. v. Weber, Inc.*, No. 5:20-cv-06069, United States District Court for the Western District of Missouri. Judgment entered October 28, 2022.
- *Provisur Technologies, Inc. v. Weber, Inc.*, No. 5:21-cv-06113, United States District Court for the Western District of Missouri.
- *Provisur Technologies, Inc. v. Weber, Inc.*, Nos. 2022-1751, 2022-1813, United States Court of Appeals for the Federal Circuit. Judgment entered February 8, 2024.

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PETITION FOR A WRIT OF CERTIORARI

Petitioner Provisur Technologies, Inc. (“Petitioner” or “Provisur”) respectfully petitions for a writ of *certiorari* to review the judgment of the United States Court of Appeals for the Federal Circuit in this case.

OPINIONS BELOW

The Final Written Decisions of the Patent Trial and Appeal Board (“PTAB”) on appeal are unreported, and are reprinted in the Appendix (“App.”) 20a-97a and App. 98a-177a.

The Federal Circuit’s decision reversing in part, vacating in part, and remanding the PTAB’s Final Written Decisions is reported at 92 F.4th 1059 (Fed. Cir. 2024) and reprinted at App. 1a.

The Federal Circuit’s order denying Provisur’s petition for rehearing *en banc* is reprinted at App. 178a.

JURISDICTION

The Federal Circuit entered judgment on February 8, 2024. A petition for rehearing was denied on March 27, 2024. App. 178a-179a. The jurisdiction of this Court is invoked under 28 U.S.C. § 1254(1).

STATUTORY PROVISIONS

35 U.S.C. § 102(a) provides in relevant part:

A person shall be entitled to a patent unless —

- (1) the claimed invention was patented or described in a printed publication or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention[.]

35 U.S.C. § 311(b) provides in relevant part:

A petitioner in an inter partes review may request to cancel as unpatentable 1 or more claims of a patent only on a ground that could be raised under section 102 or 103 and only on the basis of prior art consisting of patents or printed publications.

STATEMENT OF THE CASE

In the decision below, the Federal Circuit held that product manuals distributed to a limited number of customers—customers who purchased the products (and received their accompanying manuals) at significant expense, and who agreed to express prohibitions on further distribution and requirements that the manuals’ confidentiality be maintained—constituted printed publications that could be asserted in IPR. In so doing, the Federal Circuit disregarded the factual circumstances that have for decades informed whether a document constitutes a printed publication—such as cost, confidentiality, and extent of dissemination—finding these factors to be irrelevant because the products the manuals accompanied were on sale. The Federal Circuit’s decision is erroneous because it creates an impermissible bright-line rule allowing any product manual distributed with an on-sale product to be asserted in IPR, notwithstanding its accessibility to the interested public, which effectively nullifies the statutory limitation on the types of prior art that can be asserted in IPR.

In 2012, Congress passed the America Invents Act (“AIA”), which, *inter alia*, created the PTAB and established IPR proceedings—an administrative proceeding and alternative to litigation in which a patent challenger may ask the U.S. Patent and Trademark Office (“PTO”) to reconsider the patentability of earlier granted patent claims. The AIA expressly restricted the scope of IPR proceedings, limiting a petitioner to challenge claims “only on grounds that could be raised under section 102 or 103 and *only on the basis of prior art consisting of patents*

or printed publications.” 35 U.S.C. § 311(b) (emphasis added).

As a result, not all prior art that might otherwise render a claim unpatentable or invalid (for instance, during prosecution by the PTO or in district court litigation) can be asserted as a basis for challenging a patent in IPR. In particular, references that were allegedly “in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention,” 35 U.S.C. § 102(a)(1), cannot be used in IPR. In drawing this distinction, Congress expressly excluded the “more challenging types of prior art identified in 35 U.S.C. § 102, such as commercial sales[.]” *Qualcomm Inc.*, 24 F.4th at 1376.

This case, and the Federal Circuit’s decision below, concern the circumstances by which an alleged prior art reference constitutes a “printed publication,” and, by extension, the scope of what type of prior art may be asserted in IPR proceedings.

Although the AIA is relatively new, the definition of “printed publication” prior art is not. Courts have recognized for decades that, for purposes of patentability and validity, printed publications are documents that are sufficiently publicly accessible such that they could be obtained by members of the interested public exercising only reasonable diligence. *See, e.g., In re Hall*, 781 F.2d 897, 899 (Fed. Cir. 1986); *Application of Bayer*, 568 F.2d 1357, 1359 (Cust. & Pat. App. 1978); *Jazz Pharms., Inc. v. Amneal Pharms., LLC*, 895 F.3d 1347, 1356 (Fed. Cir. 2018). Whether a reference is publicly accessible requires an assessment of the totality of the circumstances, including how widely a document has been disseminated and whether it is subject to price, confidentiality, or other restrictions that would limit

its accessibility to an interested member of the public. See *Jazz Pharm., Inc.*, 895 F.3d at 1356; *In re Klopfenstein*, 380 F.3d 1345, 1350 (Fed. Cir. 2004).

In the IPR proceedings below, Respondent Weber, Inc. (“Weber”) alleged that certain manuals for its own slicing machines constituted printed publication prior art, and challenged Provisur’s U.S. Patent Nos. 10,639,812 (the “812 patent”) and 10,625,436 (the “436 patent”) on grounds including those manuals, alone or in combination with prior art patents. Although the PTAB instituted IPR, its Final Written Decision found that the manuals in question were not publicly accessible to those of skill in the art, and thus did not constitute printed publications that could be raised in IPR. The PTAB credited evidence demonstrating that Weber went to great lengths to maintain the secrecy of those manuals, including by distributing them only to a handful of customers—commercial operators who had purchased slicing machines at costs in the hundreds of thousands of dollars—subject to confidentiality restrictions against further dissemination. The PTAB further recognized that customers who possessed the manuals kept them under lock and key, consistent with industry practice against sharing of such documentation. As one Weber executive admitted, in his decades of experience in the field, he had never seen another company’s operating manual. Under those circumstances, the PTAB found that the mere distribution of the manuals to a limited number of discrete entities who had purchased Weber’s slicing machines, without any showing that they could have been accessible to a skilled artisan exercising reasonable diligence, did not make them printed publications that could be raised in IPR. In fact, the PTAB found that Weber had failed to even

define the relevant public, much less prove they could have located and received the manuals.

On appeal, a panel of the Federal Circuit (the “Panel”) reversed, creating a new bright-line rule that any reference that can be obtained by purchasing a product (such as the product manuals in question) is *per se* a printed publication. This new bright line rule treats such documents as printed publications precisely **because** they are available with purchase (notwithstanding the circumstances of that purchase), which eradicates the barrier between “printed publication” and “on sale” art that Congress expressly established in the AIA. The test adopted by the Panel expressly bypasses the factual investigation necessary to determine public accessibility, including how few persons actually received the reference, whether a prohibitively high price would bar access to an interested member of the public, or whether confidentiality requirements and industry practice would prohibit further circulation of the document. At its core, the decision below provides that private sale of a product always and automatically amounts to public accessibility of its accompanying documentation, notwithstanding that “printed publications” and “on-sale” references fall into two distinct categories of prior art under the patent law.

The Federal Circuit’s determination contravenes both precedent and statute. First, it upends the longstanding requirement that courts evaluate the totality of the circumstances in determining whether a document constitutes a prior-art printed publication. Second, it effectively permits IPR petitioners to challenge claims based on prior art that was allegedly “on sale,” in direct contravention of

§ 311(b), impermissibly expanding IPR beyond the statutory scope Congress afforded.

I. Factual and Procedural History Below

Provisur owns the '812 and '436 patents, which are directed towards high-speed mechanical slicers for use in food processing and packaging plants. App. 2a. In 2019, Provisur sued Weber, its competitor, for infringement of the '812 and '436 patents, among others. In response, Weber filed a petition for IPR before the PTAB.

By filing its IPR petition, Weber took advantage of the “number of benefits to accused infringers” afforded by the AIA, including a lower burden of proof for proving unpatentability: Weber could prove its case by only a preponderance of the evidence, rather than the clear and convincing evidence required to invalidate a patent in district court litigation. *See Thryv, Inc v. Click-To-Call Techs., LP*, 590 U.S. 45, 63–64 (Gorsuch, J., dissenting) (IPR “provides a number of benefits to accused infringers,” including “allow[ing] a party challenging a patent all manner of discovery” under a lower burden of proof for unpatentability). In exchange, Weber submitted to various constraints, including the statutory limitations on the permissible prior art that could be asserted, as well as IPR estoppel provisions. *See* 35 U.S.C. §§ 311(b); 315.

Weber’s petitions raised several grounds of unpatentability, each of which included the operating manuals for its own competing food slicers. App. 6a-7a. Weber also identified patents and patent publications, including U.S. Patent No. 5,628,237 (“Lindee”) and U.S. Patent Publication No. 2009/0145272 (“Sandberg”). App. 6a. It is undisputed that Lindee and Sandberg, either alone or in

combination, do not render unpatentable any challenged claim; in order to prevail, Weber needed to prove that its manuals constituted printed publications and that they taught the limitations of Provisur's patent claims. Weber also asserted the same manuals at trial as prior art, lost on invalidity, and did not appeal. As IPR petitioner, Weber bore the burden to prove that its manuals were prior art that could be asserted in IPR. *Jazz Pharms.*, 895 F.3d at 1356; *Qualcomm Inc.*, 24 F.4th at 1376.

A. After IPR Trial, the PTAB Concluded that Weber's Operating Manuals Are Not Printed Publications.

The IPR proceedings below involved abundant discovery and evidence on which the PTAB based its determination, including eight fact and expert declarations and nine depositions. In addition to competing experts on both sides, five Weber employees were deposed, as was Weber's former U.S. CEO and a representative of one of Weber's customers. On this well-developed record, the PTAB concluded that Weber had failed to carry its burden to prove the manuals were printed publications under 35 U.S.C. § 311(b), and that the challenged claims were not unpatentable. App. 8a-9a.

In reaching its determination, the PTAB considered the totality of the circumstances surrounding Weber's distribution of the manuals. As it found, the manuals were only available to a handful of commercial entities that had purchased one of Weber's industrial slicing machines, and that such machines were prohibitively expensive. App. 60a. Weber sold its slicing machines at prices up to \$700,000, and had only identified ten unique entities

ever received the machines and their accompanying manuals. App. 7a.

Moreover, the PTAB found that the manuals themselves were subject to confidentiality restrictions, which prohibited dissemination to non-customers. App. 8a. Specifically, Weber maintained ownership over the manuals' content through the terms and conditions of its sales, including by "maintain[ing] proprietary rights" in the manuals after their transfer to a customer. App. 53a. Further still, the PTAB found that public disclosure of product manuals is not a norm in the industry, and that Weber's customers went to great lengths to protect the secrecy of the manuals, with one keeping the manual in a "wire cage" behind a "locked door accessible only by certain employees[.]" App. 55a. The PTAB even credited one of Weber's own declarants who conceded that in thirty-one years in the industry, he had never seen a competitor's operating manual. App. 59a.

The PTAB also expressly found non-credible Weber's employee declarations that it would have made the manuals available upon request, had any members of the interested public asked. App. 54a. As it noted, Weber had only shown a single instance where it released product documentation to a non-purchaser—a former Weber intern (who was possibly under continuing confidentiality obligations) who was allowed to use some unspecified excerpts for a university thesis. App. 57a-58a. That was in keeping with company policy, which required approval and a release from the "CEO of sales" before any documentation could be released. App. 57a. Indeed, even the trade shows where Weber allegedly made the manuals accessible "were open to customers by invitation only," App. 56a, and at such shows, Weber

allowed only cursory reviews of the documentation under its employees' close supervision. App. 59a.

Notably, the PTAB found there was no showing that Weber's customers—the only persons who were shown to have access to these manuals—were members of the interested public. App. 56a. Indeed, the PTAB found that Weber did not even “attempt to [d]efine who constitutes ‘persons interested and ordinary skilled’ for purposes of gauging [the] evidence of public accessibility,” much less prove that they could have obtained the manuals by exercising reasonable diligence. App. 136a.

Thus, the PTAB concluded that Weber's manual could only be acquired by paying a prohibitively expensive price to obtain a commercial slicing machine, and only then by agreeing to strict confidentiality restrictions; it held that under those circumstances, the manuals were not publicly accessible. App. 60a-61a. As a result, the manuals were not printed publications that could be raised in IPR, and Weber's patent challenges necessarily failed. App. 60a-61.

B. The Federal Circuit Reversed the PTAB's Factual Findings and Credibility Determinations.

On appeal, the Panel reversed, holding that Weber's product manuals were “printed publications” because they were distributed with products that were on sale before the priority date of the challenged claims. App. 19a (the “Decision”). In reversing, the Panel wrote that the PTAB placed an “inordinate emphasis” on confidentiality restrictions and the costs one would have to incur to receive the manuals, holding that these were not “determinative” factors

under the public accessibility test, so long as the reference *could be* acquired, under *some* circumstances. App. 13a.

To justify its rewriting of the test for public accessibility, the Panel held that “the printed-publication inquiry is focused on the interested public, not the general public,” which in this case includes “commercial entities that can afford high-cost slicers.” App. 12a (citing *GoPro, Inc. v. Contour IP Holding LLC*, 908 F.3d 690, 695 (Fed. Cir. 2018)). But the Panel cited no precedent—and Petitioners are aware of none—supporting the notion that a document is a printed publication so long as it is accessible to “entities that can afford” it (or its accompanying product), notwithstanding any other circumstances that could bear on its public accessibility—especially where, as here, those “commercial entities” have not been shown to be identical with those of skill in the art.

REASONS FOR GRANTING THE PETITION

The Panel’s conflation of a reference that is supposedly “on sale” with a “printed publication” is directly at odds with the Patent Statute and the AIA, as well as the legislative history and decades of case law. Specifically, the Panel’s Decision (1) is wholly inconsistent with the long-standing requirement that a determination of public accessibility requires an analysis of the totality of the circumstances, and (2) effectively allows IPR petitioners to bypass statute and challenge patentability by asserting that a reference was on sale or distributed with a product that was on sale, in contravention of Section 311(b).

Left unchecked, the Federal Circuit’s decision will impermissibly expand the scope of IPR beyond its

statutory limits. This Court should ensure that only patents and printed publications are permissible grounds in IPR proceedings, just as Congress intended and established.

I. The Panel’s Decision Upends Decades of Precedent Requiring That a Document Be Publicly Accessible to Constitute a Printed Publication.

Since the term “printed publication” first appeared in the Patent Act of 1836, it has been understood to refer only to public-facing documents. More than 130 years ago, commentators recognized that to qualify as a printed publication, a reference must be “intended and employed for the communication of ideas to persons in general” and “actually published in such a manner that anyone who chooses may avail himself of the information it contains.” William C. Robinson, *The Law of Patents for Useful Inventions*, §§ 326-27 (1890); *id.* at § 325; *see also I.C.E. Corp. v. Armco Steel Corp.*, 250 F. Supp. 738, 740-41 (S.D.N.Y. 1966) (the term “printed publication” contemplates “public knowledge or use” and has been construed to mean “not secret”).

Indeed, broad public accessibility has long been the *sine qua non* of the “printed publication” inquiry. For decades, courts have required proof that a purported printed publication was publicly accessible to those interested in the subject matter, and thus part of the “public domain.” *See In re Hall*, 781 F.2d at 899; *Application of Bayer*, 568 F.2d at 1359; *Jazz Pharm., Inc.*, 895 F.3d at 1355 (collecting cases). As a result, and until the Federal Circuit ruled otherwise, “[a] reference [was] considered publicly accessible upon a satisfactory showing that such document has been disseminated or otherwise made available to the

extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate it.” *Jazz Pharm., Inc.*, 895 F.3d at 1356.

Whether a reference constitutes a “printed publication” under § 102(b) is a legal conclusion based on underlying factual findings. *Id.* The public accessibility of that reference is a question of fact that is reviewed for substantial evidence. *Id.* Ultimately, determining if a document is a publicly accessible printed publication requires a “case-by-case inquiry into the facts and circumstances surrounding the reference’s disclosure to members of the public.” *Id.* (citing *In re Klopfenstein*, 380 F.3d at 1350).

The Panel’s Decision upends the decades-old precedent on public accessibility. Instead of considering whether information is in the “public domain” or could be “located” by those of skill in the art exercising reasonable diligence—neither of which standard the manuals meet—the Federal Circuit lowered the bar considerably, expanding printed publications to include confidential documents that were accessible only to a small group of customers purchasing industrial equipment for their own commercial use. App. 12a (defining the “interested public” as “commercial entities that can afford high-cost slicers”).

As a result, references like the product manuals in question now constitute printed publications so long as they are available for or with purchase, and the inquiry ends there. Such references are also now eligible to be raised in IPR, even though Congress expressly excluded “on sale” prior art from the permissible grounds that could be raised in such proceedings. The Federal Circuit’s conflation of

printed publication and on sale prior art ignored the very purpose of the public accessibility test: to ensure that the alleged teachings in those references were actually available to those of skill in the art—and thus could be used to “promote the progress of science and useful arts.” U.S. CONST. Art. I, § 8.

Its holding is plainly erroneous, and this Court should grant *certiorari*. Unless reversed, the decision below will transform the test for public accessibility into a bright-line inquiry that erases the distinctions between categories of prior art, and this Court has long rejected the adoption of rigid rules that are inconsistent with statute.

A. The Panel Erred by Conflating Private Sale with Public Accessibility and by Applying a Bright-Line Rule for Public Accessibility Instead of Considering the Totality of the Circumstances.

The Federal Circuit’s determination that documentation made available with a product that is placed on sale necessarily constitutes a publicly accessible printed publication is antithetical to decades of precedent, and obscures Congress’s clear differentiation between the two.

It has been long recognized that the assessment of whether a document constitutes a printed publication “requires a case-by-case inquiry into the facts and circumstances surrounding the reference’s disclosure to members of the public.” *In re Klopfenstein*, 380 F.3d at 1358; *Jazz Pharms., Inc.*, 895 F.3d at 1356 (quoting *Klopfenstein*); *VidStream LLC v. Twitter, Inc.*, 981 F.3d 1060, 1065 (Fed. Cir. 2020) (same); *Samsung Electronics Co. v. Infobridge Pte. Ltd.*, 929 F.3d 1363, 1369 (Fed. Cir. 2019) (“Public accessibility depends on

a careful, case-by-case examination of how a particular reference was disseminated, to whom, for how long, and under what circumstances.”). In the context of commercial documents such as product manuals, key factors that inform this analysis include (i) whether the price required to obtain the document (and its accompanying product) is prohibitive and (ii) whether the document is subject to confidentiality restriction. *See Centripetal Networks, Inc. v. Cisco Sys., Inc.*, 847 F. App'x 869, 876-77 (Fed. Cir. 2021). The Federal Circuit’s decision upends this requisite analysis; in fact, it chastised the PTAB for considering those very factors.

Until recently, most cases analyzing whether a reference constituted a “printed publication” under 35 U.S.C. § 102(b) did so in the context of academic papers. *See, e.g., In re Cronyn*, 890 F.2d 1158, 1161 (Fed. Cir. 1989); *In re Klopfenstein*, 380 F.3d at 1352; *In re Hall*, 781 F.2d at 897. In those cases, the papers and articles in question did not need to be purchased, and the question of their public accessibility centered on whether a member of the interested public could locate the paper or article with reasonable diligence. For instance, in *In re Cronyn*, the Federal Circuit found that a student’s thesis available in a university library was not a printed publication because it was only presented to a handful of faculty members and had not been catalogued or indexed in a meaningful way, 890 F.2d at 1161; whereas in *In re Klopfenstein*, a scientific presentation constituted a printed publication where it was displayed for an extended period of time at multiple venues, with no stated expectation that information would not be copied or reproduced, 380 F.3d at 1352.

Although commercial documentation like the Weber product manuals at issue here differs from academic papers—as do the circumstances of their dissemination—the question of public accessibility is the very same: Was the reference at issue made available in such a way that members of the relevant public could identify, access, and use it? Indeed, “[p]ublic accessibility is not limited to circumstances of free or academic distributions; ‘commercial distribution’ can qualify.” *Centripetal Networks*, 847 F. App’x. at 878. But alleged public accessibility based on commercial distribution requires the same totality of the circumstances analysis as it does in the context of “free” distribution. *Id.*

In *Centripetal*, the Federal Circuit found that a user manual for software was a printed publication even though it was not free, but it did so based on the specific facts at bar: the software was not cost-prohibitive, was widely distributed—more than 500 customers bought it—and there were no confidentiality restrictions imposed on purchasers. *Id.* at 877-88. That is, the *Centripetal* manual was deemed publicly accessible **despite** the fact that it was available only by purchasing a software product, not **because** that software was available for purchase.

Yet here, the Panel below reduced the public accessibility analysis to one dispositive question: Is a product on sale, such that its manual can be obtained through purchase? This analysis rejects factors long deemed critical to the printed publication inquiry—like cost, confidentiality, and the extent of dissemination. As a result, “printed publication” prior art now encompasses the accompanying documentation for *anything* placed on sale before the effective filing date of a patent claim, and the fact-

intensive public accessibility inquiry has been substituted by a binary inquiry. Troublingly, the Panel set aside the PTAB's relevant factual findings under the proper standard: that the manuals were prohibitively expensive and subject to strict confidentiality restrictions, and that Weber did not (and would not have) provided the manuals to non-purchasers. App 60a. Under the totality of the circumstances approach, these factors should have provided more than substantial evidence that the manuals were not publicly accessible. Instead, they became irrelevant under a new standard inconsistent with decades of case law.

In short, the Panel's creation of a bright-line rule for assessing public accessibility cannot be squared with precedent, with the Patent Statute (which lists printed publications and on sale prior art as *two separate and distinct categories*), or with the AIA (which permits IPR challenges based only on the former and not the latter). The Panel's Decision also undermines the requirement that a printed publication be accessible to the interested public exercising only reasonable diligence, not just certain "commercial entities that can afford" to spend more than half a million dollars on industrial equipment. App. 12a. Needless to say, Weber did not show (and the Federal Circuit did not hold) that any of those "commercial entities" purchased the slicers just to access their associated manuals.

This Court has repeatedly intervened when the Federal Circuit inappropriately adopts a rigid rule inconsistent with statute or precedent. *See, e.g., KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007) (reversing the Federal Circuit because it "analyzed [an] issue in a narrow, rigid manner inconsistent with [the statute]

and precedent.”); *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006) (reversing the Federal Circuit’s application of a general rule instead of four-factor test for injunctive relief); *Festo Corp. v. Shoketsu Kinzoku Kogyo*, 535 U.S. 722, 737 (2002) (holding that the Federal Circuit erred when it abandoned a flexible estoppel analysis in favor of a complete bar). It should do so again here.

**B. The Panel Erred in Holding That
Restricted, Confidential Documents
Can Be Asserted as a Printed
Publication to Defeat a Patent in an
Inter Partes Review.**

It is both a longstanding rule and common sense that documents subject to confidentiality restrictions are not publicly accessible, and thus cannot qualify as printed publications. *See In re Klopfenstein*, 380 F.3d at 1351 (“Where professional and behavioral norms entitle a party to a reasonable expectation that the information displayed will not be copied, we are more reluctant to find something a ‘printed publication.’”). To the contrary, references are publicly accessible where they are disseminated without restriction. *See, e.g., id.* at 1350 (reference was publicly accessible where there was “no stated expectation that the information would not be copied or reproduced by those viewing it”); *GoPro, Inc. v. Contour IP Holding LLC*, 908 F.3d 690, 695 (Fed. Cir. 2018) (reference was publicly accessible where it was “disseminated with no restrictions and was intended to reach the general public”).

Until now, that basic proposition—that confidentiality obligations are incompatible with public accessibility—has been uncontroversial. But

the Panel's Decision disrupts this established understanding. In fact, the Federal Circuit held that such restrictions are not "dispositive" and criticized the PTAB for considering them as part of its totality-of-the-circumstances analysis. App. 12a.

This is a stark and misguided departure from precedent. The Federal Circuit had long held that references like the manuals at issue—distributed only to a small number of recipients, and with restrictions on further dissemination—are not prior art printed publications. *Cordis Corp. v. Boston Sci. Corp.*, 561 F.3d 1319, 1333 (Fed. Cir. 2009); *see also N. Telecom Inc. v. Datapoint Corp.*, 908 F.2d 931, 936-37 (Fed. Cir. 1990) (documents distributed to fifty companies, with legends barring further reproduction or transfer, were not printed publications because proponent did not establish "that anyone could have had access to the documents by the exercise of reasonable diligence"). Even where the Federal Circuit found other types of references to constitute printed publications, it expressly relied on the fact that those documents did *not* impose any restrictions on use or further distribution. *See, e.g., Centripetal Networks*, F. App'x. at 878; *Jazz Pharms.*, 895 F.3d at 1358.

The Panel's decision to discard this factor from the printed publication analysis undermines the very nature of public accessibility. Indeed, it incentivizes companies like Weber to shield their purported advancements from the public, ensuring that those companies will still be able to assert them offensively against competitors like Provisur.

That outcome is troubling on its face, and inconsistent with Congressional intent. As Senator Leahy explained, through the AIA, Congress aimed to rid the patent system of "private uses or secret

processes” which are purposefully withheld from the public domain and then unveiled as patent-defeating prior art. 157 Cong. Rec. 3415 (2011). The Panel’s Decision will necessarily have a chilling effect: Provisur entered into the bargain of the patent system, sharing its inventions with the world in exchange for a limited term of monopoly, only for that monopoly to be denied on the basis of Weber’s own confidential documents. This will only incentivize companies to keep their innovations secret, rather than filing for patents that can enrich the public and not merely their inventors. The Court should grant *certiorari* to ensure that such “secret” prior art cannot invalidate patent claims in IPR.

II. The Panel’s Decision Is in Direct Conflict with 35 U.S.C. § 311(b), Which Does Not Permit “On Sale” Prior Art to Be Raised in IPR.

Like the Patent Statute itself, the AIA is predicated on a careful balance. IPR petitioners benefit from a streamlined proceeding and a lower burden of proof as compared to district court litigation, but are limited in the types of challenges they can assert, and are estopped from relitigating those grounds in parallel infringement actions. The Panel Decision upends that balance.

Under the plain terms of the AIA, an IPR petitioner may challenge patent claims “only on a ground that could be raised under [S]ection 102 [novelty] or 103 [obviousness] and only on the basis of prior art consisting of patents or printed publications.” 35 U.S.C. § 311(b). This statutory limitation was adopted from the predecessor of IPR, *ex parte* reexamination, which was first established in

1980. 35 U.S.C. § 301(a); *see also* *Cuozzo Speed Techs., LLC v. Lee*, 579 U.S. 261, 267 (2016) (summarizing legislative history of IPR and other forms of reexamination that pre-dated IPR). Section 301(a), like Section 311(b), expressly excludes reexamination based on “on sale” prior art. *Compare* § 301(a) with § 311(b); *see also* *Qualcomm Inc.*, 24 F.4th at 1376 (recognizing that “in the context of the reexamination statute . . . ‘questions of public use and on sale were explicitly excluded by statute from those issues on which reexamination could be obtained.’”) (citing *Quad Envtl. Techs. Corp. v. Union Sanitary Dist.*, 946 F.2d 870, 875 (Fed. Cir. 1991)).

As the Federal Circuit has recognized, the exclusion of on sale prior art from the grounds available in PTO proceedings was deliberate and consistent with Congress’s intent to establish an efficient, limited-scope procedure for challenging patentability on certain issues. “The congressional purpose in restricting reexamination to printed documents . . . was to provide a cheaper and less time-consuming alternative to challenge patent validity on certain issues.” *Quad Envtl. Techs. Corp.*, 946 F.2d at n. 7 (citing H.R. Rep. No. 1307 at 4). Congress’s adoption of this same standard in IPR is not a mere technicality or a procedural quirk, but part and parcel with the AIA itself. That also makes sense given the reduced burden of proof on an IPR challenger; patents and printed publications are by their very nature public-facing documents, and Congress deemed those references appropriate grounds for unpatentability under the preponderance of the evidence standard in IPR. Meanwhile, other types of prior art that are not necessarily accessible to one of skill in the art—references that are placed on sale, or in public use—are ineligible to be raised under this lowered bar.

Yet now, the Panel has permitted references to be asserted in IPR solely because they were available with purchase, and not because they were actually accessible to the interested public. That vitiates Section 311(b) and the entire Patent Statute, which makes printed publications and on sale references distinct categories of prior art entitled to different treatment. Such a judicial rewriting of plain statutory language cannot stand.

III. The Questions Presented Are Important.

The questions presented by the Panel's Decision are critically important and warrant a grant of *certiorari* for at least three reasons.

First, the Panel's Decision undermines the plain and unambiguous text of the Patent Statute. Left to stand, the Panel's Decision expands the scope of IPR beyond the statutory limitation imposed by Congress. This Court has not hesitated to intervene where the Federal Circuit has misconstrued the plain text of the Patent Statute. *See, e.g., Return Mail, Inc. v. United States Postal Serv.*, 587 U.S. 618 (2019); *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348 (2018). It should do so again here.

Second, the Panel's conflation of private sales of confidential information with publicly accessible printed publications threatens the overarching policy goal of the Patent Statute—to promote public disclosure and discourage self-serving commercial secrecy. *See Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 480-81 (1974). Of course, where an accused infringer can prove that the public has already been apprised of a patent's invention, those claims ought not to stand. *See id.* (one of the policies underlying patent law is that “that which is [already] in the

public domain cannot be removed therefrom by action of the States.”). But on the other side of the same coin, where a patentee (like Provisur) teaches those of skill in the art about a new and useful innovation, through disclosures not otherwise readily available, the claims of its patents should stand. The Panel’s Decision now allows a challenger to defeat a patent by pointing to its own confidential documents so long as *someone* received them—notwithstanding who, how, or under what circumstances. As such, the Federal Circuit’s holding will have a chilling effect on patent rights and public knowledge. Companies like Provisur will have less incentive to disclose their own inventions if the bar for cancelling their patent claims is lowered. And, companies like Weber will have all the more reason to guard their own documentation closely, knowing that it can still be used to invalidate a competitor’s patents.

Third, the Panel’s Decision offers a vehicle to address a recurring issue that requires this Court’s intervention: the treatment of product manuals as prior art. On the one hand, such manuals are written documents that, if sufficiently accessible to the interested public (for instance, if posted on a company’s website or if freely available with a widely distributed product), might qualify as a printed publication. On the other hand, some manuals—like those here—only accompany products that are sold at high prices to a small number of customers, subject to confidentiality restrictions, and may qualify only as on sale prior art if the circumstances of their distribution weighs against public accessibility. For the reasons set forth above, this distinction is not academic. The Patent Statute draws a clear dividing line between on sale prior art and printed publications, and only the latter may be raised in IPR.

This issue has been before the Court before, and, if not resolved now, will surely arise again. *See* Pet. for Writ of Cert., *Centripetal Networks, Inc. v. Cisco Systems, Inc.*, No. SC21-193 (Aug. 9, 2021) (seeking certiorari to address whether software manual constituted a printed publication). Moreover, absent guidance from this Court, the Panel’s Decision will invite petitioners to continue to push the boundaries of what constitutes a printed publication in IPR—especially now that the totality of the circumstances need not be analyzed.

Simply put, it cannot be the case that product manuals are *per se* printed publications so long as they accompany a product that was on sale, regardless of the circumstances of such sale. For all the reasons discussed *supra*, the Panel’s treatment of product manuals is contrary to the plain terms of the Patent Statute and AIA, inconsistent with decades of precedent, and calls for swift correction by this Court.

CONCLUSION

For all the foregoing reasons, the Court should grant the petition for writ of certiorari.

June 25, 2024

Respectfully submitted,

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UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

WEBER, INC.,
Appellant

v.

PROVISUR TECHNOLOGIES, INC.,
Appellee

2022-1751, 2022-1813

Appeals from the United States Patent and Trademark Office, Patent Trial and Appeal Board in Nos. IPR2020- 01556, 1PR2020-01557.

Decided: February 8, 2024

RICHARD CRUDO, Sterne Kessler Goldstein & Fox PLLC, Washington, DC, argued for appellant. Also represented by TREVOR O'NEILL, RALPH WILSON POWERS, III.

MICHAEL BABBITT, Willkie Farr & Gallagher LLP, Chicago, IL, argued for appellee. Also represented by CRAIG C. MARTIN, REN-HOW HARN, SARA TONNIES HORTON.

Before REYNA, HUGHES, and STARK, *Circuit Judges*.

REYNA, Circuit Judge.

Weber appeals two final written decisions from the Patent Trial and Appeal Board. The Board determined that Weber failed to establish the unpatentability of the claims of Provisur's patents. The Board first found that Weber's operating manuals were not prior art printed publications. The Board also determined that the prior art did not disclose two challenged claim terms, one of which was included in the Board's claim construction of the challenged claims. We reverse the Board's printed publication determinations, vacate the Board's conclusions regarding Weber's failure to establish unpatentability of the challenged claims, and remand for further proceedings.

BACKGROUND

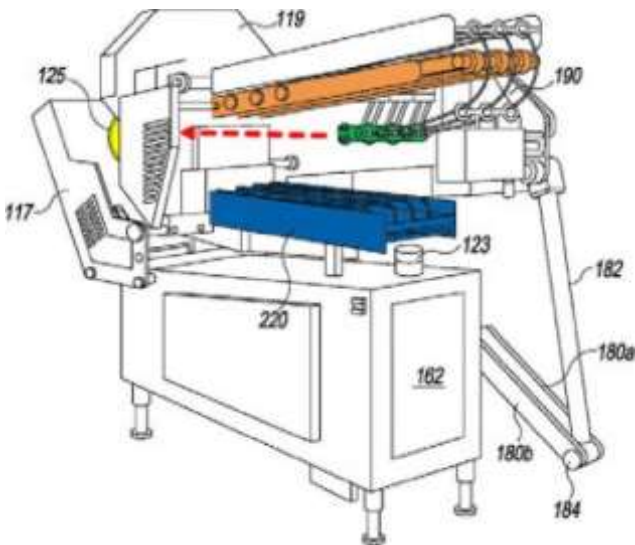
A. *U.S. Patent Nos. 10,639,812 and 10,625,436*

Provisur is the owner of U.S. Patent Nos. 10,639,812 ("812 patent") and 10,625,436 ("436 patent"). The '812 and '436 patents relate to high-speed mechanical slicers used in food-processing plants to slice and package food articles, such as meats and cheeses. '812 patent at Abstract.¹ Although the slicers have numerous components, three claimed components are relevant here: (1) the "food article loading apparatus"; (2) the "food article feed

¹ We primarily cite to the '812 patent, which shares a common specification with the '436 patent. The parties agree that claim 1 of the '812 patent is representative of the challenged claims in this appeal. Appellant Br. 12; Appellee Br. 2.

apparatus”; and (3) the “food article stop gate.” *Id.* at 11:16-38.²

Figures 1B and 1 below³ display the loading apparatus (108, labeled in Figure 1) (colored in blue) and the feed apparatus (120, labeled in Figure 1) (colored in orange). The loading apparatus (108) includes a lift tray (220) on which food articles are loaded while the lift tray is in a horizontal staging position. *Id.* at 2:52-54; 9:28-34. When the food is ready to be sliced, the lift tray pivots to an elevated position, as shown in Figure 1. From that position, the food articles enter the slicer’s overhead feed apparatus (120). *Id.* at 4:33-43; 9:60-10:4.



² We will subsequently refer to the “food article loading apparatus” as the “loading apparatus,” the “food article feed apparatus” as the “feed apparatus,” and the “food article stop gate” as the “stop gate.”

³ All figure and image annotations have been provided by the parties unless otherwise noted.

Fig. 1B

Id. at Fig. 1B; Appellant Br. 8.

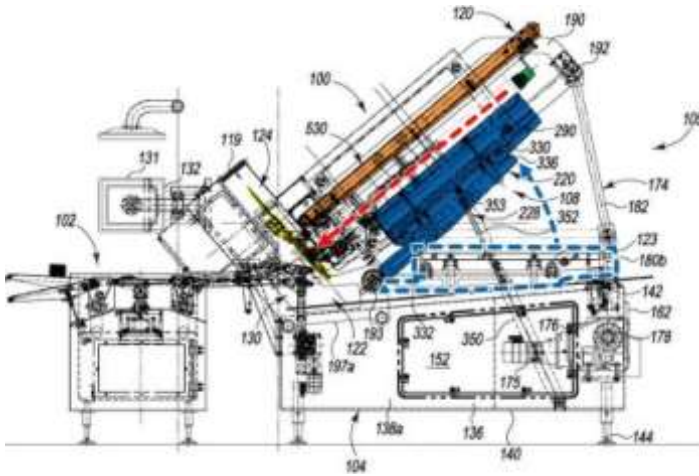


Fig. 1

Id. at Fig. 1; Appellant Br. 8.

As shown in Figures 1 and 1B above, and Figure 2 below, the feed apparatus (120) contains “grippers” (894, labeled in the patent) (colored in green). The grippers grasp the food articles from behind while they are still supported by the lift tray and drive them downward along the feed path (shown in red dashed arrow) until they reach the slicing station (124) (shown in yellow in Figure 1). ’812 patent at 2:55-60; 9:13-24. There, the food articles are sliced by the slicing blade (125) (shown in yellow in Figure 1B). *Id.* at 4:43-46.

Figure 2 shows a top-down view of the slicer where each gripper is independently driven by a conveyor belt

5a

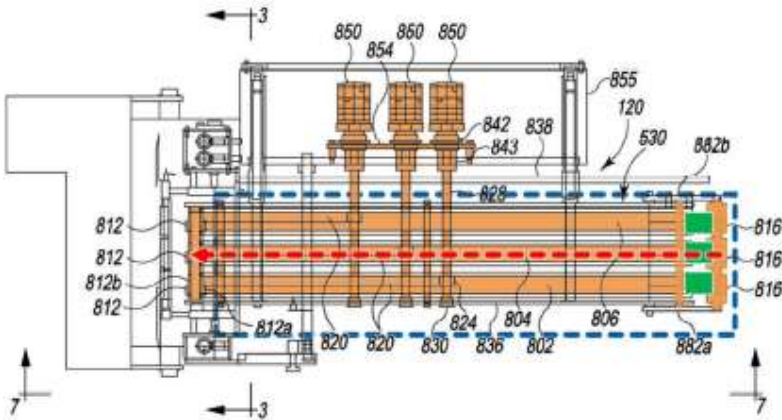


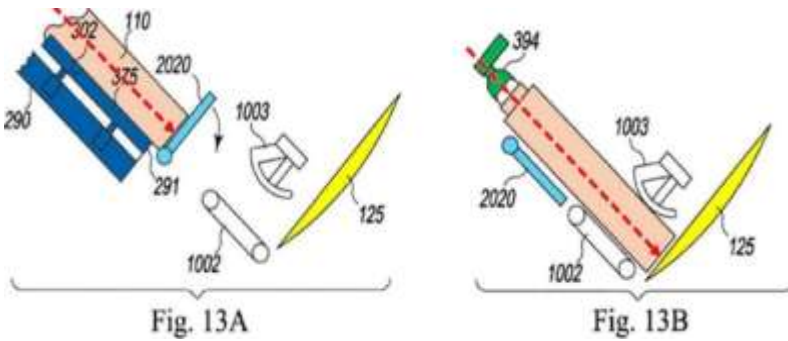
Fig. 2

(802, 804, 806) coupled to its own servomotors (850).
Id. at 9:15-24; 10:44-46.

Id. at Fig. 2; Appellant Br. 10. Figure 2 shows that the feed apparatus (colored in orange) is positioned above the loading apparatus's lift tray (shown in blue dashed lines), such that the grippers (colored in green), feed path (red dashed arrow), and lift tray are generally aligned when viewed from a top-down position.

In addition to the loading apparatus and feed apparatus components, the stop gate, the third claimed component relevant on appeal, serves several purposes. '812 patent at 3:7-8. As shown below in Figure 13A, when a food article is loaded, it travels along the path of the red dashed arrow toward the slicing blade (125) until it reaches the stop gate (2020). The stop gate (shown in light blue) can, in this elevated position, act as a gate to temporarily block a loaded food article from prematurely sliding into the slicing station. *Id.* at 10:8-13. When the stop gate is lowered, as shown in Figure 13B, the stop gate acts as

a floor to support the loaded food article as it slides toward the slicing blade (125). *Id.*



Figs. 13A & 13B; Appellant Br. 11-12.

Representative claim 1 of the '812 patent recites a food slicer containing two limitations at issue here: (1) the “disposed over” limitation and the (2) “stop gate” limitation. The “disposed over” limitation requires “a food article feed apparatus disposed over [the] food article loading apparatus.” '812 patent at 11:17-18. The “stop gate” limitation requires that the stop gate support food articles “when the lift tray assembly is moved from its elevated position” to load new food articles. *Id.* at 11:33-36.

B. The Prior Art

Weber asserted prior art references in both *inter partes* review (“IPR”) proceedings that generally relate to food slicers. Weber presented its obviousness theories based on its commercial food slicer operating manuals in combination with U.S. Patent No. 5,628,237 (“Lindee”) and U.S. Patent Publication No. 2009/0145272 (“Sandberg”). J.A. 8; J.A. 84-85. Weber’s operating manuals were created and disseminated to accompany and explain how to use Weber’s commercial food slicer products. J.A. 1311-

481; J.A. 1698—99.⁴ The operating manuals disclose that Weber’s food slicer contains a “product conveyer” that is first in a horizontal position to receive food articles. J.A. 1325. After receiving food articles, the product conveyer is then elevated to a position where the food articles will be driven along a feed path toward a slicing blade. J.A. 1350. The operating manuals also disclose that a “product bed conveyor supports the transport of the product” and “prevents the products from sliding into the outlet in an uncontrolled manner.” J.A. 1331.

C. *Procedural History*

Provisur sued Weber in federal court alleging infringement of the ’812 and ’436 patent claims. Weber then filed two IPR petitions alleging the unpatentability of claims 111 of the ’812 patent and claims 1-16 of the ’436 patent. J.A. 277-345. The Board instituted the IPRs based on obviousness theories involving Weber’s operating manuals in combination with the Lindee and Sandberg references. J.A. 419-43. Relying on *In re Enhanced Security Research, LLC*, 739 F.3d 1347 (Fed. Cir. 2014), the Board initially found in its institution decisions that Weber provided evidence to “support the public availability” of the operating manuals. J.A. 434-42. In its final written decisions, the Board changed course. The Board concluded that the operating manuals do not qualify as printed publications. The Board first found that the operating manuals were distributed to just “ten unique customers.” J.A. 29; J.A. 106. The Board

⁴ Since the operating manuals are substantively identical in relevant portions, even though they are dated years apart, we cite to the 2006 operating manual as representative. Appellant Br. 14.

further found that the operating manuals were subject to confidentiality restrictions based on the Board's interpretation of the operating manuals' copyright notice and the intellectual property rights clause in Weber's terms and conditions underlying the sales of each slicer product. J.A. 28-31; J.A. 105-08.

On the merits, the Board determined that, even if Weber's manuals qualify as printed publications, Weber's asserted prior art combinations do not disclose the "disposed over" and "stop gate" limitations from claim 1 in each challenged patent. J.A. 70; J.A. 139. For the "disposed over" limitation, the Board's conclusion rested on its claim construction of the term "disposed over" to require that the "feed apparatus and its conveyor belts and grippers are 'positioned above and in vertical and lateral alignment with' the food article loading apparatus and its lift tray assembly." J.A. 18; J.A. 95. The Board explained that vertical alignment means that the feed apparatus is "directly above the loading apparatus." J.A. 13; J.A. 90. And in the Board's view, laterally aligned means that "there is no offset between the sides of feed apparatus and the loading apparatus" when viewed from above. J.A. 13; J.A. 90.

For the "stop gate" limitation, the Board rejected Weber's expert's reliance on Figures 10 and 227 of the operating manuals. The Board faulted these figures for not physically depicting a food article in the slicer or the food lift tray and criticized this as insufficient to show that the product bed conveyor of the operating manuals supported the food article when the product conveyor moves from its elevated position. J.A. 68-69; J.A. 142.

Thus, the Board determined that Weber's asserted prior art failed to disclose the "disposed over" and

“stop gate” limitations from claim 1 in each challenged patent. As a result, the Board concluded that Weber failed to carry its burden of proving unpatentability for the dependent claims. J.A. 73-74; J.A. 146-47.

Weber appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

STANDARD OF REVIEW

We review de novo the Board’s legal conclusion on whether a reference is a printed publication under 35 U.S.C. § 102(b) and its underlying factual findings for substantial evidence. *Valve Corp. v. Ironburg Inventions Ltd.*, 8 F.4th 1364, 1372-73 (Fed. Cir. 2021).

Claim construction is a question of law with underlying questions of fact. *Wasica Fin. GmbH v. Cont’l Auto. Sys., Inc.*, 853 F.3d 1272, 1278 (Fed. Cir. 2017). We review de novo the Board’s ultimate claim construction and its supporting determinations that are based on intrinsic evidence. *Personalized Media Commc’ns, LLC v. Apple Inc.*, 952 F.3d 1336, 1339 (Fed. Cir. 2020).

We review the Board’s ultimate obviousness determinations on a de novo basis and any underlying factual determinations for substantial evidence. *Rembrandt Diagnostics, LP v. Alere, Inc.*, 76 F.4th 1376, 1382 (Fed. Cir. 2023). The scope and content of the prior art is a question of fact. *Intel Corp. v. PACT XPP Schweiz AG*, 61 F.4th 1373, 1378 (Fed. Cir. 2023). Substantial evidence means “such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.” *Id.* (citation omitted).

DISCUSSION

Weber appeals the Board’s conclusions that it failed to establish unpatentability of the challenged claims. Weber first argues that the Board erred in its determinations that Weber’s operating manuals were not “printed publication[s]” under pre-AIA 35 U.S.C. § 102(b). Weber next argues that the Board erred in its claim construction of the “disposed over” claim term. Finally, Weber challenges the Board’s determinations that the operating manuals do not disclose the “stop gate” limitation. We address each issue in turn.

A. *Printed Publications*

The statutory phrase “printed publication” from § 102 has been defined to mean a reference that was “sufficiently accessible to the public interested in the art.” *In re Klopfenstein*, 380 F.3d 1345, 1348 (Fed. Cir. 2004) (citation omitted). The touchstone of whether a reference constitutes a printed publication is public accessibility. *Jazz Pharms., Inc. v. Amneal Pharms., LLC*, 895 F.3d 1347, 1355 (Fed. Cir. 2018). The standard for public accessibility is whether interested members of the relevant public could locate the reference by reasonable diligence. *Valve*, 8 F.4th at 1376.

Weber contends that the Board erred in determining that Weber’s operating manuals were not sufficiently publicly accessible to constitute printed publications. According to Weber, the Board misapplied our public-accessibility precedent, including *Cordis Corp. v. Boston Scientific Corp.*, 561 F.3d 1319 (Fed. Cir. 2009), and misinterpreted the record evidence. We first address the Board’s reliance on *Cordis* and then the evidence of record.

The Board improperly reviewed this case in the context of the *Cordis* framework. In *Cordis*, the references were two academic monographs describing an inventor's work on intravascular stents that were only distributed to a handful of university and hospital colleagues as well as two companies interested in commercializing the technology. 561 F.3d at 1333-34. We observed that the record contained "clear evidence that such academic norms gave rise to an expectation that disclosures will remain confidential." *Id.* at 1334. There was also no showing "that these or similar commercial entities typically would make the existence of such documents known and would honor requests for public access." *Id.* at 1335.

Cordis is readily distinguishable from this case. Weber's operating manuals were created for dissemination to the interested public to provide instructions about how to assemble, use, clean, and maintain Weber's slicer, as well as guidance for addressing malfunctions that users might encounter. J.A. 1313-19 (table of contents); J.A. 1312 (customer service information). These operating manuals stand in stark contrast to *Cordis* and the confidential nature of the monographs and circumstances surrounding disclosure, including academic confidentiality norms. Where, as here, "a publication's purpose is 'dialogue with the intended audience,' that purpose indicates public accessibility." *Valve*, 8 F.4th at 1374 (citation omitted).

The record evidence shows that Weber's operating manuals were accessible to interested members of the relevant public⁵ by reasonable diligence. For instance,

⁵ The parties dispute the exact number of customers who received the operating manuals (whether it was ten entities or

Weber employees testified that the operating manuals could be obtained either upon purchase⁶ of the Weber food slicer or upon request directed to a Weber employee. *See, e.g.*, J.A. 2222-34 (Weber employee declaration); J.A. 3288-97 (Weber employee declaration). Weber's declarants provided actual examples of deliveries of the operating manuals to customers. *E.g.*, J.A. 2222-34.

Weber's employees' declarations are corroborated and supported by testimony, delivery notes, invoices, price lists, declarations, and email exchanges between Weber employees and customers. *See, e.g.*, J.A. 4200-427 (Weber invoices and delivery notes); J.A. 7664-68 (customer declaration); J.A. 12754-68 (email correspondence regarding manual dissemination). A Weber employee also testified that the operating manuals were publicly accessible at certain trade shows or at Weber's factory showrooms. J.A. 9580-612 (Weber employee declaration). Provisur's Vice-President conceded that Weber sold about forty slicers during the relevant time period, and it was Weber's "general practice" to provide operating manuals with the purchase of each slicer. J.A. 12579-80 (40:7-41:20).

over forty entities), but we need not resolve that dispute here to review public accessibility. Appellant Br. 31; Appellee Br. 6. No minimum number of occasions of access is dispositive of the public accessibility inquiry in all cases.

⁶ At oral argument, Provisur's counsel argued that the high cost of Weber's commercial slicers prevented the operating manuals from being considered sufficiently accessible by reasonable diligence. Oral Arg. 18:14-19:25. Cost alone cannot be dispositive because the printed-publication inquiry is focused on the interested public, not the general public. *See GoPro, Inc. v. Contour IP Holding LLC*, 908 F.3d 690, 695 (Fed. Cir. 2018). Here, the interested public includes commercial entities that can afford high-cost slicers.

The foregoing establishes that the Board's printed publication determinations are unsupported by substantial evidence. *See, e.g., In re Enhanced Security Research*, 739 F.3d at 1354-57 (affirming the Board's determination that an operating manual distributed with a software product was publicly accessible because of testimony and advertisements); *GoPro, Inc. v. Contour IP Holding LLC*, 908 F.3d 690,694-96 (Fed. Cir. 2018) (involving a trade show).

The Board's contrary conclusions on public accessibility were based in part on the Board's inordinate emphasis on alleged confidentiality restrictions associated with the operating manuals. The Board first reviewed the operating manuals' copyright notice, which state that the operating manuals may not "be reproduced or transferred in any way." J.A. 1312. The Board determined that this notice "require[s] confidentiality." J.A. 29-30; J.A. 106-07. The Board also found another confidentiality restriction based on the intellectual property rights clause from Weber's terms and conditions, which covers sales of each slicer product, and states "[c]ost estimates, drafts, drawings and other documents remain the property of [Weber]." J.A. 30 (quoting J.A. 12889); J.A. 107-08.

We disagree with the Board's decisions that the operating manuals were not printed publications because they were subject to confidentiality restrictions. The copyright notice itself allows the original owners and their personnel to copy the operating manual for their own internal use. J.A. 1312. Weber expressly instructed customers who were re-selling their slicers to transfer their operating manuals to purchasing third parties. J.A. 12487. Weber's assertion of copyright ownership does not

negate its own ability to make the reference publicly accessible. *Cf. Correge v. Murphy*, 705 F.2d 1326,1328-30 (Fed. Cir. 1983) (“A mere assertion of ownership can not convert what was in fact a public disclosure and offer to sell to numerous potential customers into a non-disclosure.”). The intellectual property rights clause from Weber’s terms and conditions covering sales, likewise, has no dispositive bearing on Weber’s public dissemination of operating manuals to owners after a sale has been consummated.

We hold that the Board’s determinations that Weber’s operating manuals were not publicly accessible are unsupported by substantial evidence. We thus reverse the Board’s finding that Weber’s operating manuals do not qualify as printed publications.

B. *The “Disposed Over” Limitation*

A claim term is given its ordinary and customary meaning—the meaning that a term would have to a skilled artisan at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303,1312-13 (Fed. Cir. 2005) (en bane). In construing a claim term, we first look to the intrinsic evidence, including the claims themselves, the specification, and the prosecution history of the patent. *Personalized Media*, 952 F.3d at 1340.

The Board construed the term “disposed over” to require that the “feed apparatus and its conveyor belts and grippers are ‘positioned above and in vertical and lateral alignment with’ the food article loading apparatus and its lift tray assembly.” J.A. 18; J.A. 95. Weber argues that this construction is incorrect because the Board narrowly construed the “disposed

over” term by importing limitations from the specification when the claim term only requires that the feed apparatus “is generally positioned above” the loading apparatus. Appellant Br. 53. We conclude that the Board erred in its construction.

The claim language itself only recites that the “feed apparatus” is “disposed over” the “loading apparatus.” ’812 patent at 11:17-18. The claim language contains no restrictions that would require direct alignment of the conveyor belts and lift tray assembly from the two apparatuses. “Had the patent drafter intended to limit the claims” to address the alignment of the conveyor belts and lift tray assembly between the apparatuses, “narrower language could have been used in the claim.” *Cyntec Co. v. Chilisin Elecs. Corp.*, 84 F.4th 979, 986 (Fed. Cir. 2023). The parties’ experts generally agreed that the plain claim language did not contain additional alignment requirements. J.A. 9481 (1f74) (Weber’s expert); J.A. 12005 (133:16-22) (Provisur’s expert). Our case law does “not support prescribing a more particularized meaning unless a narrower construction is required by the specification or prosecution history.” *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1329 (Fed. Cir. 2013).

Further, the specification does not require the direct alignment of the conveyor belts and lift tray assembly between the two apparatuses. The phrase “disposed over” does not appear in the specification. The specification does explain, which the Board relied on, that the loading apparatus’s grippers and lift tray are “in line with the food article feed paths.” ’812 patent at 2:52-53; 9:10-25. But these passages merely describe the spatial relationship of specific components—the feed path and grippers as aligned

with the loading apparatus's lift tray. These passages do not disclose a limitation that the feed apparatus, including the conveyer belts that drive the grippers, must be aligned with the loading apparatus and its lift tray. "[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments." *Phillips*, 415 F.3d at 1323. Our review of the prosecution history does not change our conclusion.

The plain language of the claims, read in view of the specification, requires only that the feed apparatus be generally positioned above the loading apparatus. The claim term's recitation of broad language "compels a similarly broad result." *Malvern Panalytical Inc. v. TA Instruments-Waters LLC*, 85 F.4th 1365, 1372 (Fed. Cir. 2023). We need not consider the extrinsic evidence that limits the claim scope in a manner not contemplated by the intrinsic record. *Genuine Enabling Tech. LLC v. Nintendo Co.*, 29 F.4th 1365, 1372-73 (Fed. Cir. 2022). Accordingly, we reverse the Board's claim construction.

We note that Provisur does not dispute that Weber's prior art satisfies this limitation under Weber's proposed construction. *See generally* Appellee Br.; Oral Arg. 7:107:50, 27:54-28. As a result, our review of the Board's claim construction is dispositive of this issue. We therefore hold that the asserted prior art discloses the "disposed over" limitation from claim 1 in each challenged patent.

C. *The "Stop Gate" Limitation*

Weber contends that the Board erred in determining that the "product bed conveyer" disclosed in Weber's operating manuals, including as shown in

Figures 10 and 227, does not disclose the “stop gate” limitation. We conclude that the Board’s determinations are not supported by substantial evidence.

The claim language requires that the “stop gate” support food articles “when the lift tray assembly is moved from its elevated position” back down to load new food articles. ’812 patent at 11:33-36. Like the stop gate, the product bed conveyor “supports the transport of the product” and “prevents the products from sliding into the outlet in an uncontrolled manner.” J.A. 1331. The core remaining issue is whether the product bed conveyor is in its floor position *when* the product bed (lift tray) moves from its elevated position to the loading position.

Figures 10 and 227 below depict the product bed conveyor (shown in light blue) acting in the supporting floor position *when* the product holders are at the end of the feed path and the product bed (shown in dark blue) is lowered to receive more food articles.

5.12.1 Product bed conveyor (product length up to 120 mm)



Fig_ 227 Position of the product bed conveyor

J.A. 1480 (Fig. 227); Appellant Br. 64.

1.6 2 Product bed conveyor (product length up to 1200 rum)



Fig. 10 Position of the product bed conveyor

J.A. 1331 (Fig. 10); Appellant Br. 64.

Based on these figures, Weber's expert testified that a skilled artisan would understand that, because the product holder is near the blade, the food slicer is at the end of the slicing operation and the product holder has finished feeding the food article into the blade while the product bed conveyor is in the floor position. J.A. 9486-90 (Ifif86-88). Weber's expert explained that a skilled artisan would understand that the lift tray moves from its elevated position to its loading position for additional food articles during the fast-slicing operation when the product bed conveyor is in the floor position. *Id.*

In reaching a contrary conclusion, the Board failed to meaningfully consider Weber's cited Figures 10 and 227 and accompanying expert testimony. J.A. 65-69; J.A. 141-42. The Board primarily faulted the operating manuals for not physically showing a food article in the slicer or the product conveyor. J.A. 68-69; J.A. 142. But since the product conveyor is expressly disclosed by the operating manuals, an image of a food article is not needed to understand

those teachings. The evidence offered by Weber, showing that the operating manuals disclose the “stop gate” limitation from claim 1 in each challenged patent, leaves the Board’s contrary finding without substantial evidentiary support. Thus, we reverse the Board’s finding.

CONCLUSION

We have considered Provisur’s remaining arguments and find them unpersuasive. We reverse the Board’s determinations that Weber’s operating manuals are not printed publications and that the prior art does not disclose the “disposed over” and “stop gate” limitations. We vacate the Board’s conclusions that Weber failed to establish unpatentability of claims 1-11 of the ’812 patent and claims 1-16 of the ’436 patent, and remand for further proceedings consistent with this opinion.

REVERSED-IN-PART, VACATED-IN-PART
AND REMANDED

COSTS

Costs against Provisur.

UNITED STATES PATENT AND
TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND
APPEAL BOARD

WEBER, INC.,
Petitioner,
v.

PROVISUR TECHNOLOGIES, INC.,
Patent Owner.

IPR2020-01556
Patent 10,625,436 B2

Before MITCHELL G. WEATHERLY, FRANCES L.
IPPOLITO, and JON M. JURGOVAN, *Administrative
Patent Judges.*

JURGOVAN, *Administrative Patent Judge.*

JUDGMENT
Final Written Decision
Determining No Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

A. *Background*

Weber, Inc. (“Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting *inter partes* review of claims 1–16 of U.S. Patent No. 10,625,436 B2 (Ex. 1001, “the ’436 Patent”). Provisur Technologies, Inc. (“Patent Owner”) filed a Preliminary Response. Paper 8 (“Prelim. Resp.”). Applying the standard set forth in 35 U.S.C. § 314(a), we instituted review of claims 1–16 of the ’436 Patent.

During trial, Patent Owner filed a Response (Paper 23, “Resp.”), Petitioner filed a Reply (Paper 30), and Patent Owner filed a Sur-Reply (Paper 48).¹ Patent Owner also filed a Motion to Exclude (Paper 59), Petitioner filed an Opposition to the Motion to Exclude (Paper 60), and Patent Owner filed a Reply to Petitioner’s Opposition (Paper 63).

An Oral Hearing took place on December 16, 2021. The Hearing Transcript is included in the record. Paper 64 (“Tr.”).

After considering the parties’ arguments and supporting evidence, we determine that Petitioner has not proved by a preponderance of the evidence that claims 1–16 are unpatentable. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d) (2020).

¹ Patent Owner also submitted redacted versions of its Preliminary Response, Response, and Sur-Reply. Papers 8, 24, 49. The redactions relate to information subject to our Protective Orders. Papers 12, 58.

B. Real Parties in Interest

Petitioner identifies the following entities as real parties in interest: Textor, Inc.; Weber Maschinenbau GmbH Breidenbach; Weber Maschinenbau GmbH Neubrandenburg; and Textor Maschinenbau GmbH. Pet. 80. Patent Owner identifies Provisur Technologies, Inc. as the sole real party in interest. Paper 5, 1.

C. Related Matters

The parties list as related matters *Provisur Technologies, Inc. v. Weber, Inc. et al*, Case No. 5-20-cv-06069 (MOWD); and IPR2020-01557, which challenges U.S. Patent No. 10,639,812 B2, and which, like the '436 Patent, is a division of U.S. Application No. 13/099,325 filed May 2, 2011. Pet. 80; Paper 5, 1.

D. Summary of the '436 Patent

The '436 patent describes a high speed slicing machine for slicing food articles. Ex. 1001, codes (54), (57). The '436 patent explains in its background section that high speed slicing machines for food articles can be configured as an automatically loaded, continuous feed machine, or a back-clamp or gripper type slicing machine. Ex. 1001, 1:36–45. The '436 patent explains that “it would be desirable to slice plural food articles with independent feeding and weighing capabilities, with hygienic and operational enhancements.” *Id.* at 2:37–40.

Figure 1B is reproduced below:

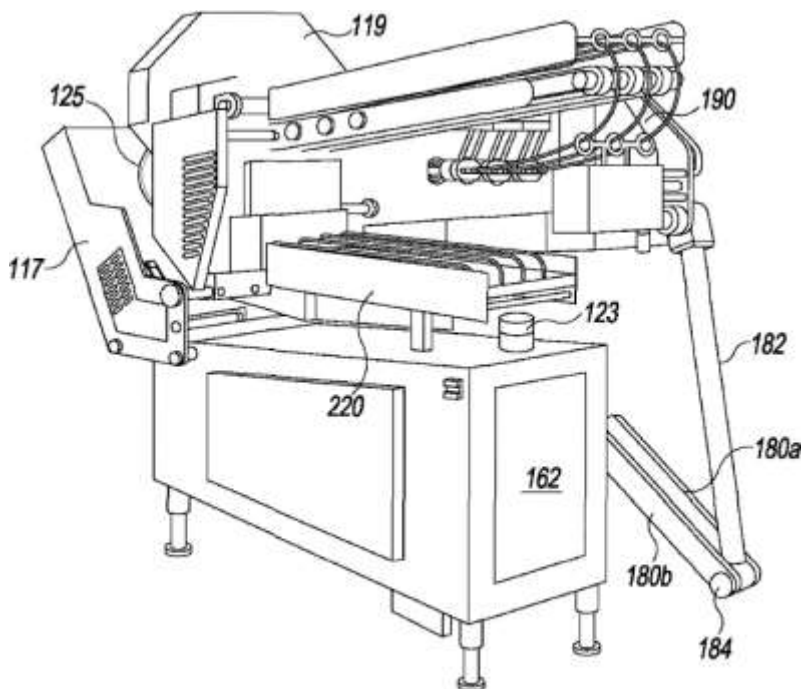


Fig. 1B

Figure 1B illustrates a slicing machine. *Id.* at 3:31–32.

The slicing machine illustrated in Figure 1B includes food article feed mechanism frame 190, slicing blade 125, and guard 119. *Id.* at 5:14–31. “[T]he elevation of the food article feed apparatus [120, not labeled in Figure 1B] can be adjusted by using the servomotor to selectively pivot the levers 180a, 180b and lower the rear of the frame 190.” *Id.* at 5:29–32. An automatic food article loading apparatus includes lift tray assembly 220, which receives the food articles to be sliced. *See id.* at 9:15–22. “[T]ray positioning apparatus [not labeled in Figure 1B] pivots the tray

assembly 220 to be parallel with, and below the food article feed apparatus 120 in a staging position.” *Id.*

Figure 8 is reproduced below:

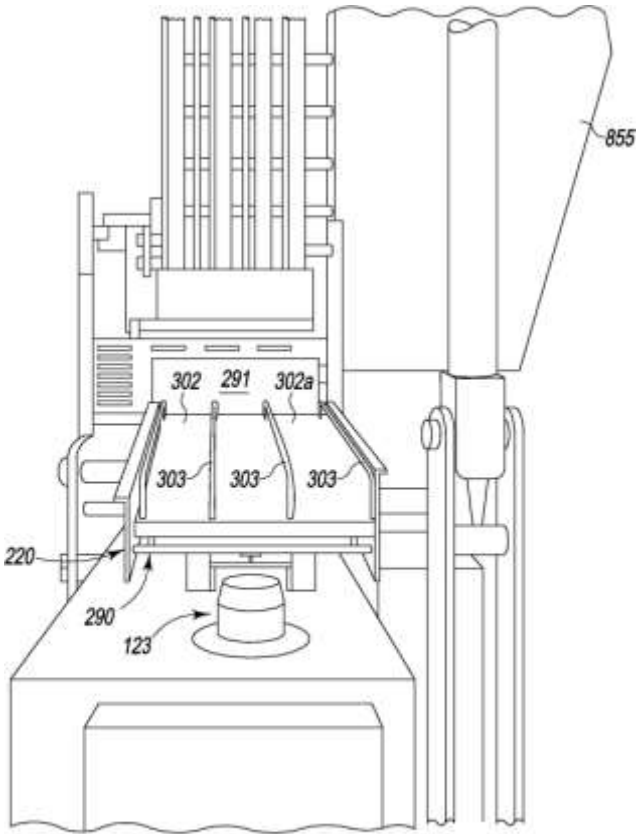


Fig. 8

Figure 8 is a rear perspective view of the slicing machine. *Id.* at 3:64–65.

As shown in Figure 8, lift tray assembly 220 includes frame 290 that supports a movable food article support tray 302. *Id.* at 9:23–32. Frame 290 includes end plate 291. *Id.* Food articles are loaded onto tray

302 until they abut end plate 291. *Id.* Tray 302 includes four spaced-apart guard rails 303 that define three lanes corresponding to three feed paths for the slicing machine. *Id.* Three servomotors are located within upper compartment 855 that is supported by frame 190. *Id.* at 6:7–10.

Figure 7A is reproduced below:

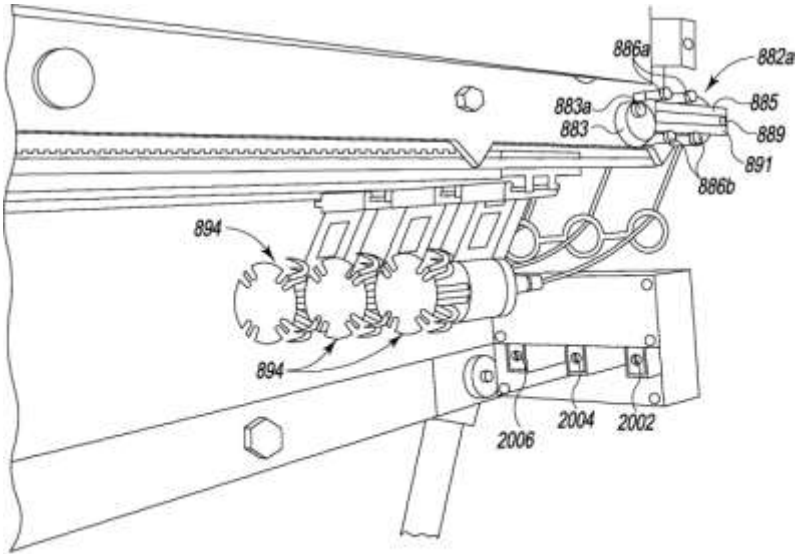


Fig. 7A

Figure 7A is a fragmentary perspective view illustrating a gripper and sensors sensing ends of food articles in a food article support tray. *Id.* at 3:50–54, 6:23–29, 10:16–29.

As shown in Figure 7A, adjustable cam belt tension adjustment mechanism 882a includes fork 885 braced by adjustable cam 883, and the fork is guided by upper and lower pins 886a, 886b to slide rearward and forward. *Id.* at 6:13–22. Gripper 894 is translated

along the food article feed path by a belt. *Id.* at 6:23–29. Sensors 2002, 2004, 2006 sense the ends of each food article in the three lanes on the tray 302, and communicate that information to the machine control. *Id.* at 10:16–29. “By knowing the exact end of the food article, the grippers know when to be activated to seize the food article.” *Id.*

E. Illustrative Claims

Petitioner challenges claims 1–16, which are all of the claims in the '436 patent. Claims 1 and 9 are the only independent claims. Claims 2–8 depend from claim 1, and claims 10–16 depend from claim 9. Claims 1 and 9 are reproduced below, with brackets noting Petitioner’s identifiers:

1. [1.p] A food article slicing machine, comprising:
 - [1.1] a food article loading apparatus with a lift tray assembly for moving food articles from a staging position to an elevated position at a beginning of a food article feed path;
 - [1.2] a food article feed apparatus disposed over the food article loading apparatus having an upper conveyor assembly with a driven endless conveyor belt used in cooperation with a food article gripper for moving the food articles along the food article feed path;
 - [1.3] a slicing station at an end of the food article feed path with a knife for slicing the food articles; and
 - [1.4] a food article stop gate disposed upstream of the slicing station that forms a portion of the food article feed path,
 - [1.5] wherein the food articles are supported in position along the food article feed path by at least the food article stop gate when the lift tray

assembly is moved when in its elevated position, and

[1.6] wherein the food article stop gate also opens to drop food article end portions.

Ex. 1001, 10:56–11:8 (bracketed labels added for ease of discussion).

9. [9.p] A food article slicing machine, comprising:

[9.1] a slicing station comprising a knife blade and a knife blade drive driving the blade along a cutting path in a cutting plane;

[9.2] a food article loading apparatus including a lift tray assembly moveable between a staging position and an elevated position, the elevated position being a position where food articles disposed within the lift tray assembly are in a food article feed path;

[9.3] a food article feed apparatus disposed over said food article loading apparatus and having a conveyor assembly with independently driven endless conveyor belts,

[9.4] wherein each of the conveyor belts is used in cooperation with an independently driven and controlled food article gripper for moving a food article along the food article feed path, and

[9.5] wherein the conveyor assembly is an upper conveyor assembly; and

[9.6] a food article stop gate disposed upstream of the slicing station that forms a portion of the food article feed path,

[9.7] wherein the food articles are supported in position along the food article feed path by at least the food article stop gate when the lift tray assembly is moved when in its elevated position, the food articles passing over the food article stop gate when the food articles move along the food

article feed path, and [9.8] wherein the food article stop gate also serves as a door for the removal of food article end portions.

Ex. 1001, 11:30–12:16 (bracketed labels added for ease of discussion).

F. Asserted Grounds

Petitioner contends that the challenged claims are unpatentable based on the following grounds:

| Claims Challenged | 35 U.S.C. §² | References/Basis |
|--------------------------|--------------------------------|--|
| 1–16 | 103 | 2006 904 manual ³ and Lindee ⁴ |
| 1–16 | 103 | 2010 904 manual ⁵ and Lindee |

² The Leahy-Smith America Invents Act, Pub. L. No. 112–29, 125 Stat. 284 (2011) (“AIA”), included revisions to 35 U.S.C. §§ 102 and 103 that became effective after the effective filing date of the challenged claims. Therefore, we apply the pre-AIA version of 35 U.S.C. §§ 102 and 103.

³ *Operating Manual: Slicer CCS 904* (English Language Translation), CCS-904_06_2006-07-01_GB / T-07_2005-11-10, by Weber Group, 1–288 (Ex. 1005) asserted as prior art under pre-AIA § 102(b). Pet. 26.

⁴ US 5,628,237, issued May 13, 1997 (Ex. 1006) asserted as prior art under pre-AIA § 102(b). Pet. 27.

⁵ *Operating Manual for the Slicer CCS 904-02 (for product lengths to 1200 mm / 1600 mm)* (English Language Translation), by Weber Group, 1–259 (Ex. 1009) asserted as prior art under pre-AIA § 102(a). Pet. 27.

Pet. 26–27. In support of its proposed grounds, Petitioner relies on the Declaration of Richard Hooper, Ph.D. *See* Ex. 1003.

II. LEVEL OF ORDINARY SKILL IN THE ART

Petitioner proposes that a person of ordinary skill in the art would have had “(1) a bachelor’s degree (or equivalent) in mechanical engineering (or a similar field) and at least two years of experience working on food processing and/or packaging systems (or in a similar field)” or “(2) at least seven years of experience working on food processing and/or packaging systems (or in a similar field).” Pet. 18 (citing Ex. 1003 ¶ 26). Patent Owner does not contest Petitioner’s definition or provide its own proposal. For purposes of this Decision, we adopt Petitioner’s proposal because Petitioner’s proposed definition is consistent with the level of skill demonstrated in the cited prior art references. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

III. CLAIM CONSTRUCTION

“In an *inter partes* review proceeding, a claim of a patent . . . shall be construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b).” 37 C.F.R. § 42.100(b) (2019). That standard “includ[es] construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” *Id.*; *see also Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). Only terms that are in controversy need to be construed, and then only to the extent necessary to resolve the controversy. *Nidec Motor Corp. v.*

Zhongshan Broad Ocean Motor Co., 868 F.3d 1013, 1017 (Fed. Cir. 2017).

We find that only one phrase is in dispute, namely, “a food article feed apparatus *disposed over* said food article loading apparatus.” Pet. 33–35, 61; Resp. 45–49; Reply 15–17; Sur-Reply 16–18 (emphasis added).

A. *Petitioner’s Contentions*

Petitioner contends that the combinations of the 2006 and 2010 904 Operating Manuals and Lindee disclose the claimed feature of a food article feed apparatus “disposed over” a food article loading apparatus. Pet. 32–35; Reply 15–19 (citing Ex. 1005, Fig. 5). Petitioner contends that, in the prior art combinations, the food article feed apparatus comprises the 2006 and 2010 904 Operating Manuals’ product holder, upper product guide, and related structure and actuators, as well as Lindee’s timing belt system. Petitioner further contends the food article loading apparatus includes the 2006 and 2010 904 Operating Manuals’ product conveyor, timing belt and related actuators and supporting structure, and Lindee’s lift tray and corresponding actuators and support structure. *Id.*

Petitioner contends that the term “disposed over” does not require vertical alignment of the feed apparatus to the loading apparatus. Reply 15. Even if it does, Petitioner contends that it “never proposed placing belts anywhere other than directly over the loading apparatus.” Reply 15 (citing Pet. 44–45, 52–53).

Petitioner supports its position with the prosecution history of the ’812 Patent, where the Examiner stated that the term “over” is broad and means “above” (not directly above), citing a dictionary

definition from Merriam- Webster. Reply 17 (citing Ex. 1002, 208–209).

B. Patent Owner's Contentions

Patent Owner argues that, in Petitioner's combinations (*see* Section 1.F), the conveyor belts, which are components of the feed apparatus, are offset to the side of, and not disposed over, the loading apparatus. Resp. 45–49. Since limitation [1.2] of claim 1 of the '436 Patent requires the feed apparatus to be "disposed over" the loading apparatus, Patent Owner argues Petitioner's combinations fail to teach or suggest this limitation. *Id.* Patent Owner also contends Petitioner's combinations would result in conveyor belts that are out of the feed paths contrary to limitation [1.2] of claim 1. *Id.*

Patent Owner contends that Petitioner's claim construction that "disposed over" means merely "above" is incorrect. Sur-Reply 16. Patent Owner notes that the specification of the '436 Patent shows the upper conveyor assembly, a component of the feed apparatus (*see* Ex. 1001, 5:50– 51), higher than and vertically in-line with the loading apparatus. *Id.* (*citing* Ex. 1001, Fig. 1B). Patent Owner contends that the specification distinguished prior machines with a feed apparatus (a "loaf sweep mechanism") located above but horizontally offset from the loading apparatus. *Id.* at 17 (Ex. 1001, 1:62–2:20). According to Patent Owner, the substantially vertically aligned stack of components envisioned by the inventors of the '436 Patent allowed for "operational enhancements" by reducing the footprint of the machine and increasing hygiene by creating a more open configuration that can be easily cleaned. *Id.* at 17 (*citing* Ex. 1001, 2:37–40; Ex. 2019 ¶¶ 71–73).

Patent Owner acknowledges that the Examiner interpreted “disposed over” broadly as “above” during prosecution of the ’436 Patent, but notes that the Examiner used the “broadest reasonable interpretation” standard, which is a different standard than used by the Board in *inter partes* reviews, which leads to a different interpretation. Sur-Reply 17–18 (citing MPEP § 2111; Ex. 1066, 208–209).

Patent Owner further states that multiple courts have rejected the broad construction of “over” to mean “above” as Petitioner proposes. Sur-Reply 18 (citing *Home Semiconductor Corp. v. Samsung Elecs. Co., Ltd.*, 701 F. App’x 1006, 1009–14 (Fed. Cir. 2017) (a layer “only ‘above’” and “merely insignificantly overlapping” a second region, was not “over” that “region.”); *Orion Energy Sys. Inc. v. Energy Bank, Inc.*, No. 16-C-1250, 2017 WL 4773301, *11–*12 (E.D. Wis. 2017) (“above” denotes direction, not positional, alignment “. . . ‘provided substantially over’ is understood to mean ‘disposed in an overlaying relationship.’”).

C. *Analysis*

From the foregoing, it is clear that the parties dispute the meaning of “disposed over” and we must construe the term. *See Nidec Motor, supra*.

“[T]he specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’” *Phillips*, 415 F.3d at 1315.

Limitation [1.2] of claim 1 recites “a food article feed apparatus *disposed over* the food article loading apparatus having an upper conveyor assembly with a driven endless conveyor belt used in cooperation with a food article gripper for moving the food articles along

the food article feed path” (emphasis added). To understand what is meant by “disposed over,” we examine how the specification describes the food article loading apparatus 108 and the food article feed apparatus 120 and their relationship to one another.

The specification of the '436 Patent describes the food article loading apparatus 108 to include a lift tray assembly 220 that moves between a staging position for loading food articles, and an elevated position bringing the food articles “in line” with respective feed paths to the slicing blade 125. Ex. 1001 at 2:53–55; 4:39–42; 9:15–56, Figs. 1, 1B, 8. The lift tray assembly 220 has three lanes corresponding to three feed paths, which are defined by four spaced-apart guard rails 303, although the lift tray assembly can be configured for “any number of paths.” *Id.* at 9:2–4, 9:28–31, Figs. 1B, 8. In the staging position, food articles are loaded into the three lanes of the lift tray assembly 220. *Id.* at 9:27–28. Lift tray positioning apparatus 228 then pivots the lift tray assembly 220 to the elevated position. *Id.* at, 9:15–22, 9:45–51. In the elevated position, the lift tray 302 aligns the food articles in their feed paths to the slicing blade 125 so that no lateral shifting of food articles is required to position them. *Id.* at code (57), 2:52– 55.

The '436 Patent describes the food article feed apparatus 120 as including an overhead conveyor assembly 530 with conveyor belts 802, 804, 806 and grippers 894 on their lower runs to engage with the ends of food articles to drive them along their feed paths toward the slicer. *Id.* at 2:55–56, 6:23–26, 7:1–7, 9:1–13, Figs. 2, 7, 7A, 7B, 7C. Since the range of movement of the grippers 894 define the feed paths of the food articles, the conveyor belts 802, 804, 806 that

drive them are necessarily aligned to the feed paths. *Id.* at 6:23–26, 9:1–14.

Moreover, in either the staging position or the elevated position, the food article feed apparatus 120 and its overhead conveyor assembly 520 with conveyor belts 802, 804, 806 and grippers 894 is *vertically and laterally* aligned with the lift tray assembly 220 of food article loading apparatus 108. *Id.* at Figs. 1, 1B, 8. Vertically aligned means that the overhead conveyor assembly 520 of the feed apparatus 120 is directly above lift tray assembly 220 of the loading apparatus 108. Laterally aligned means that, when the feed apparatus 120 and loading apparatus 108 are viewed from above, there is no offset between the overhead conveyor assembly 520 of feed apparatus and the lift tray assembly 220 of the loading apparatus. This vertical and lateral alignment enables the lift tray assembly, when in its elevated position, to be positioned so that the lanes of the lift tray which guide the food articles are aligned with the feed paths of the grippers driven by respective conveyor belts. The grippers can thus engage with the ends of the food articles and drive them along their feed paths toward the slicer. *Id.* at 2:53–56.

Thus, in the '436 Patent, the overhead conveyor assembly and grippers of the feed apparatus are “disposed over” the lift tray assembly of the loading apparatus, which pivots between the staging position to load food articles, and the elevated position where the food articles are aligned to the feed paths below the feed apparatus and its conveyors and grippers which engage and drive the food articles into the slicer. *Id.* at 2:53–56.

From the foregoing, it is clear that the specification of the '436 Patent describes only one configuration for

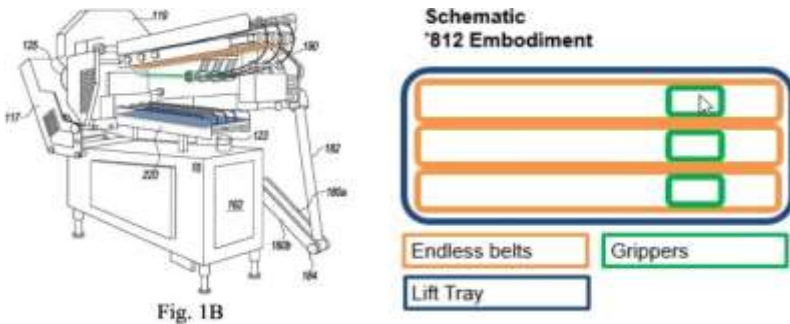
the loading apparatus 108 and the feed apparatus 120. That configuration positions the overhead conveyor assembly of the feed apparatus over the lift tray assembly of the loading apparatus in vertical and lateral alignment therewith, such that no lateral shifting of food articles is required to load and feed them from the loading apparatus into the feed apparatus. Lateral shifting refers to loading food articles from the side of the feed apparatus, rather than from below, as described in the background section of the '436 Patent. Ex. 1001, 1:64–66.

Although the Examiner interpreted “disposed over” as meaning “above” (Ex. 1002, 208–209), Patent Owner is correct that the standard in prosecution is different from that that applies in this *inter partes* review. Sur-Reply 17–18. The standard in prosecution is broadest reasonable interpretation. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1369 (Fed. Cir. 2004). In contrast, as noted, the standard here is the same as would be used in a civil action under 35 U.S.C. § 282(b). 37 C.F.R. § 42.100(b). This is often referred to as the *Phillips* standard after the Federal Circuit case that first introduced it.

Under the *Phillips* standard, claim terms must be construed in light of the specification in which they appear. *Phillips*, 415 F.3d at 1315. We find that interpreting “disposed over” as merely “above” without also requiring vertical and lateral alignment, as Petitioner proposes (Reply 16), is too broad in light of how the specification presents the relationship between the feed apparatus and loading apparatus in the '436 Patent. One of ordinary skill in the art would understand that, if the feed apparatus were vertically above but laterally offset from the load apparatus in the '436 Patent, when the lift tray is elevated, the

conveyor belts and grippers of the feed apparatus would not be aligned with the feed paths and they would not contact the ends of the food articles to drive them toward the slicing station, as the '436 Patent teaches. *See* Ex. 1001 at code (57), 2:56–58, Fig. 1B. Furthermore, the '436 Patent manifestly excludes lateral shifting of food articles to load them. *Id.* at 2:55–56. This requires the upper conveyor assembly and grippers of the feed apparatus to be vertically and laterally aligned with the lift tray assembly so that when the lift tray is pivoted to its elevated position, the conveyor belts and grippers and lanes of the lift tray are aligned with the feed paths to be traveled by the food articles.

Patent Owner's expert, Dr. William S. Howard, provides the annotated illustration of the '436 Patent's Figure 1B and a demonstrative schematic of Figure 1B, shown below. Ex. 2019 ¶ 70.



EX1001, FIG. 1B (ANNOTATED)

DEMONSTRATIVE SCHEMATIC

Dr. Howard's annotated Figure 1B of the '436 Patent and demonstrative schematic show the positional relationship between the lift tray assembly 220 (blue) of the food article loading apparatus 108 and the grippers 894 (green) and endless belts 802, 804, 806 (orange) of the food article feed apparatus 120, as illustrated above. Ex. 2019 ¶ 70.

In the annotated Figure 1B and the demonstrative schematic view of the machine above, the food article loading apparatus 108 including lift tray assembly 220 (annotated blue) is directly under the plane defined by the grippers 894 (annotated green) of the feed apparatus. *Id.* The endless belts 802, 804, 806 of the feed apparatus 120 (annotated orange) are directly above the plane of the grippers 894 of feed apparatus 120. *Id.* Dr. Howard testifies that the feed apparatus 120 is disposed over the loading apparatus 108. *Id.* He further testifies that this arrangement would allow more independent feed paths to be added to the machine, and that overall footprint of the machine would be reduced, which is advantageous in food processing facilities, which tend to have limited floor space. *Id.* We agree with Dr. Howard's testimony that the endless conveyor belts 802, 804, 806 and grippers 894 of the food article feed apparatus 120 are "disposed over" the lift tray assembly 220 of the of the food article loading apparatus 108. *Id.* at ¶ 72.

Petitioner's expert, Dr. Richard Hooper, agrees with Petitioner's proposed construction of "disposed over" as meaning "above." Ex. 1051 ¶¶ 69–75. Dr. Hooper testifies that claim 1 of the '436 Patent recites "said food article feed apparatus *having* a conveyor assembly with independently driven endless conveyor belts." He testifies that a person of ordinary skill in the art would understand the word "having" to mean that the feed apparatus would include more elements such as motors and grippers, which allegedly are not "disposed over" the loading apparatus. *Id.* ¶ 73 (citing Ex. 1001, Fig. 2 [element 850]). However, claim 1 of the '436 Patent does not recite that the food article feed apparatus has motors, nor does Dr. Hooper show that the grippers as part of the feed apparatus are not "disposed over" the loading apparatus in claim 1.

Consequently, Dr. Hooper's statements are not supported by underlying facts or data, and they are entitled to little or no weight. *See* 37 C.F.R. § 42.65.

Dr. Hooper testifies that Figure 2 of the '436 Patent shows servomotors and shafts of the feed apparatus that are not vertically above the loading apparatus. Ex. 1051 ¶ 73. The '436 Patent does not describe that it is the servomotors and shafts, however, that need to be aligned with the feed paths. Instead, the feed apparatus's conveyor belts 802, 804, 806 and grippers 894 which engage with the ends of the food articles and drive them along their feed paths to the slicer, must be "disposed over" the load apparatus's lift tray assembly 220 such that they are vertically and laterally aligned. As so aligned, when pivoted to its elevated position, the lift tray assembly's lanes which guide food articles are aligned with the feed paths traveled by the grippers by their respective endless conveyor belts as they drive the food articles to the slicer. Hence, Dr. Hooper's testimony that the servomotors and shafts of the feed apparatus are not vertically above the loading apparatus is unpersuasive.

Dictionaries can be useful in claim construction. *See Phillips*, 415 F.3d at 1318. One dictionary defines "over" as "[i]f one thing is **over** another thing or is moving **over** it, the first thing is directly above the second, either resting on it, or with a space between them." Collins Dictionary, <https://www.collinsdictionary.com/us/dictionary/english/over> (last viewed 1-18-22) (emphasis original). Exhibit 3003. This definition is closer to expressing the arrangement of the apparatuses described in the '436 Patent compared to the definition used by the Examiner. Ex. 1002, 208–209. The feed apparatus 120

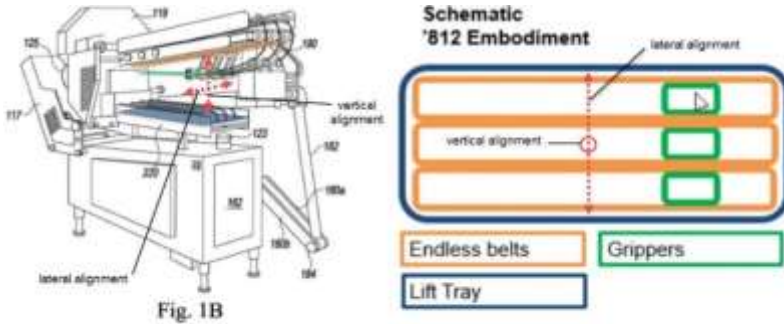
is directly above the loading apparatus 108, with a space between them. Hence, our construction is consistent with this dictionary definition, which we find more representative of the plain and ordinary meaning appropriate to the arrangement described in the '436 Patent than is the definition provided by the Examiner considering the claims under the broadest reasonable interpretation standard.

In construing various terms in the '436 Patent, the District Court substituted “positioned over” for “disposed over” in its claim construction order “given its usage throughout the Patents-at-Issue and to provide clarity for the jury.” Ex. 1063, 13. Thus, the District Court’s interpretation did not stem from any dispute between the parties, but instead was for the purpose of ensuring that a jury would understand the claim language. In contrast, in this proceeding, the parties dispute the meaning of “disposed over.” We find it necessary to further refine the District Court’s construction to resolve the controversy presented in this proceeding. *See Nidec Motor, supra*. We consider our construction to be entirely consistent with the District Court’s because “positioned over” does not mean merely “above” as Petitioner contends, but connotes that one thing is directly over another thing and they are thus aligned with one another.

Hence, in light of the foregoing, we find that the proper construction of “disposed over” means that the food article feed apparatus and its conveyor belts and grippers are “positioned above and in vertical and lateral alignment with” the food article loading apparatus and its lift tray assembly.

For the avoidance of doubt, we reproduce Dr. Howard’s annotated Figure 1B and schematic below with additional red arrows and red circle that we

include to show vertical alignment and lateral alignment of the food article feed apparatus 120 and the food article loading apparatus 108.



EX1001, FIG. 1B (ANNOTATED)

DEMONSTRATIVE SCHEMATIC

Dr. Howard's annotated Figure 1B and schematic with additional annotations we add to show vertical alignment and lateral alignment of the endless belts 802, 804, 806 (orange) and grippers 894 (green) of the food article feed apparatus 120 with the lift tray assembly 220 (blue) of the food article loading apparatus.

In Dr. Howard's annotated Figure 1B and schematic, shown above, we indicate in red arrows and red circle what is meant by vertical alignment and lateral alignment of the endless belts 802, 804, 806 and grippers 894 of food article feed apparatus 220 and the lift tray assembly 220 which defines lanes to guide the food articles. The red circle in the demonstrative indicates the vertical alignment arrow extends in the direction into the page with one end point touching the endless belts and the other end point touching the lift tray's surface. Such alignments are required for the lift tray assembly to be able to pivot from the staging position to the elevated position where the lanes defined by the lift tray assembly, and

therefore the food articles in them, are aligned with the feed paths so that the grippers, driven by the endless conveyor belts, can engage with and drive the food articles along their feed paths toward the slicer.

IV. CITED PRIOR ART REFERENCES

A. 2006 904 Operating Manual

The 2006 904 Operating Manual describes operations of a food slicer, Petitioner's CCS 904 food slicer. Ex. 1005, 3–9. Figure 6 is reproduced below:

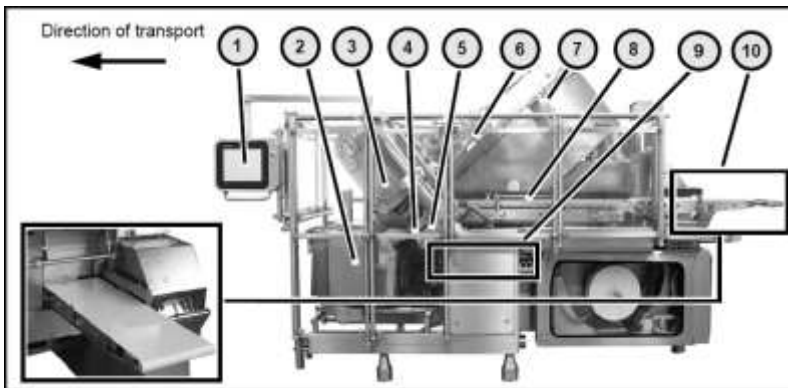


Fig. 6 Machine overview (for product lengths up to 1200 mm)

Figure 6 illustrates a slicing machine for slicing products up to 1200 mm. *Id.* at 15.

In the slicer illustrated in Figure 6, element 3 refers to a blade head housing, which contains a blade head drive, a blade head, and an involute blade. *Id.* at 15–16. Element 4 refers to a shear bar and product-section guide where the products are sliced. *Id.* Element 5 is a product bed conveyor that supports the guidance and transport of the product up to the shear bar, and serves as a product limit stop when the slicer is loaded and as a last piece ejection flap when the product's end pieces are ejected from the product

holder. *Id.* Element 6 is an upper product guide for pressing on the products from above to facilitate even transport into the slicing area. *Id.* Element 7 refers to product holders for gripping the products, feeding them into the outlet and preventing them from falling out during slicing. *Id.* Element 8 is a product conveyor for feeding the products into the slicing area. *Id.* Element 9 is an end piece removal conveyor for moving end pieces of the products out of the slicing area. *Id.* Finally, element 10 is a timing belt used by the operator or by a module connected upstream to feed products to the slicer. *Id.*

Figure 7 is reproduced below:

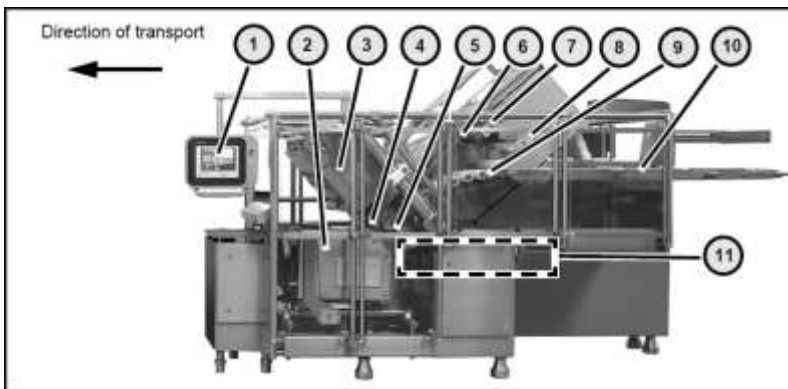


Fig. 7 Machine overview (for product lengths exceeding 1200 mm)

Figure 7 illustrates a slicing machine for slicing products exceeding 1200 mm in length. *Id.* at 17.

The slicer illustrated in Figure 7 includes elements 1–7, which are similar to elements 1–7 of the slicer illustrated in Figure 6. In addition, the slicer of Figure 7 includes a blank holder (element 8) that presses the product on to the transport tracks and thus supports an even and safe guidance of the product. *Id.* at 17–18. Element 9 is an end piece ejection flap for guiding the product into the slicing area and enabling the end

piece to be ejected. *Id.* Element 10 is a product conveyor for feeding products into the slicing area. *Id.* Element 11 is an optional end piece removal conveyor for moving out of the slicing area the first slices or the end pieces of the products. *Id.*

Figures 28 and 29 of the 2006 904 Operating Manual, reproduced below, illustrate a slicing process and a process of ejecting end pieces. *Id.* at 40.

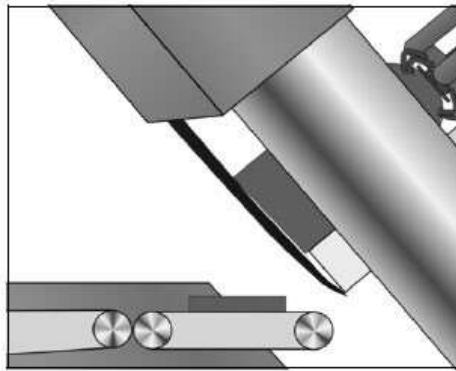


Fig. 28 Slicing process

Figure 28 illustrates a slicing process for products fed to the blade. *Id.*

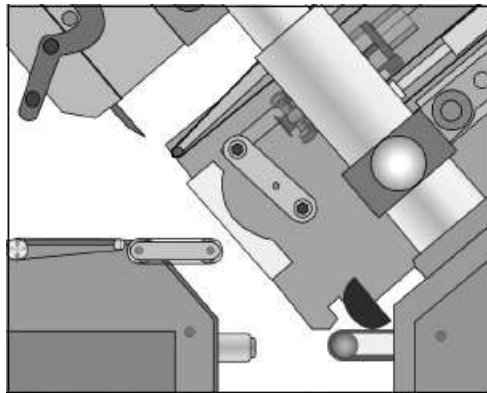


Fig. 29 Ejecting end pieces

Figure 29 illustrates ejection of end product pieces.

Id.

The ejection process illustrated in Figure 29 (i) pulls back the end pieces of the products using the product holder, (ii) pivots the product bed conveyor into the ejection position, and (iii) uses the product holder to let the end pieces fall such that (iv) the end pieces fall on to the end piece removal conveyor and are removed.

Id.

B. 2010 904 Operating Manual

The 2010 904 Operating Manual describes the operations of Petitioner's CCS 904-02 food slicer. Ex. 1009, 1, 3–8. According to Petitioner, the 2010 904 Operating Manual is “substantively identical” to the 2006 904 Operating Manual except that it describes “an additional, optional feature that enables each of the upper conveyors (i.e., the ‘product guide’) to be independently driven by separate drive motors.” Pet. 9 (citing Ex. 1009, 166; Ex. 1003 ¶¶ 45–46). Because the drive motors are the focus of Petitioner's reliance on the 2010 904 Operating Manual, our summary below centers on that feature.

Figure 211 of the 2010 904 Operating Manual is reproduced below:

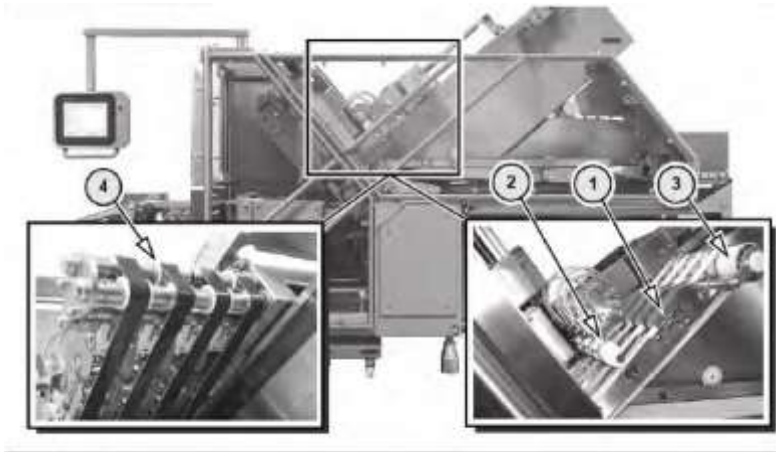


Fig. 211 Product guide

Figure 211 illustrates elements of the CCS 904-02 slicer's drive unit. Ex. 1009, 166.

Figure 211 shows support frames (element 1), a cylinder holder (element 2), and a standard drive unit (element 3) or an optional drive unit with separate drives (element 4). Ex. 1009, 166. With the standard drive unit, all tracks of the product guide are driven at the same speed by the drive unit. *Id.* In the optionally available version of the slicer with separate drives, all tracks of the product guide can be individually driven with different speeds. *Id.*

C. Insufficiency of Showing that the 2006 904 Operating Manual and 2010 904 Operating Manual Qualify as Printed Publications

A petitioner may assert unpatentability of a claim of a challenged patent “only under a ground that could be raised under section 102 or 103 and only on the

basis of prior art consisting of patents or *printed publications*.” 35 U.S.C. § 311(b) (italics added). A threshold, disputed issue in this case is whether Petitioner has made an adequate showing that the 2006 904 Operating Manual and the 2010 904 Operating Manual qualify as prior art printed publications within the meaning of the statute. *See* Pet. 18–24; Resp. 4–23; Reply 1–9; Sur-Reply 1–9.

1. *Legal Standards*

In determining whether a reference qualifies as a printed publication, “[t]he key inquiry is whether or not a reference has been made ‘publicly accessible.’” *M&K Holdings, Inc. v. Samsung Elecs. Co.*, 985 F.3d 1376, 1379 (Fed. Cir. 2021) (quoting *In re Klopfenstein*, 380 F.3d 1345, 1350 (Fed. Cir. 2004)); *In re Hall*, 781 F.2d 897, 898–99 (Fed. Cir. 1986). “A reference will be considered publicly accessible if it was ‘disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence can locate it.’” *Medtronic, Inc. v. Barry*, 891 F.3d 1368, 1380 (Fed. Cir. 2018) (quoting *Kyocera Wireless Corp. v. Int’ Trade Comm’n*, 545 F.3d 1340, 1350 (Fed. Cir. 2008)); *Acceleration Bay, LLC v. Activision Blizzard Inc.*, 908 F.3d 765, 772 (Fed. Cir. 2018) (citing *Jazz Pharm., Inc. v. Amneal Pharm., LLC*, 895 F.3d 1347, 1355–56 (Fed. Cir. 2018)).

At the institution stage, the operative question is whether a petitioner has established a reasonable likelihood that a reference is a printed publication. *Hulu, LLC v. Sound View Innovations, LLC*, IPR2018-01039, Paper 29, 21 (PTAB Dec. 20, 2019) (precedential). This differs from the standard in a final written decision, at which point “the petitioner

bears the burden of establishing by a preponderance of the evidence that a particular document is a printed publication.” *Nobel Biocare Servs. AG v. Intradent USA, Inc.*, 903 F.3d 1365, 1375 (Fed. Cir. 2018) (citing *Medtronic*, 891 F.3d at 1380).

2. Summary of Petitioner’s Contentions

Petitioner asserts that the “[t]he 2006 904 [Operating Manual] is an operations manual for the Weber 904 food slicer” and that the 2010 904 Operating Manual “is a later version of the first 904 manual.” Pet. 3, 9. Petitioner presents testimonial evidence to support its assertions that the Weber 904 food slicer was sold to the general public at least as early as November 15, 2007, and that the 2006 904 Operating Manual “was shipped with each 904 slicer sold between November 15, 2007, and May 2009.” *Id.* at 19 (citing Ex. 1011 ¶¶ 11–12; Ex. 1010 ¶¶ 11–18). According to Petitioner, paper and electronic copies of the 2006 904 Operating Manual accompanied each of the forty-nine 904 slicers delivered to customers during that period, of which eleven were delivered within the United States. *Id.* at 23 (citing Ex. 1011 ¶ 16; Ex. 1010 ¶ 16).

Petitioner further asserts that the 2006 904 Operating Manual was available to interested members of the public upon request. *Id.* at 21–22 (citing Ex. 1011 ¶¶ 4, 12; Ex. 1010 ¶ 21). Petitioner contends that the advertising and magazine articles announcing the release of the 904 slicer made interested members of the public aware of the 904 slicer and, therefore, the 2006 904 Operating Manual. *Id.* at 24 (citing Ex. 1011 ¶ 13). Petitioner further contends it “routinely allowed members of the public

to inspect the 904 Manuals at trade shows” and provides testimonial evidence in support of its contention. Reply 8 (citing Ex. 1061 ¶¶ 3–15; Ex. 1060 ¶¶ 33–43).

Petitioner presents similar arguments and evidence to support the public accessibility of the 2010 904 Operating Manual. *See* Pet. 23–24. In particular, Petitioner argues that the 2010 904 Operating Manual accompanied each of the five 904 slicers that were sold between February 15, 2010, and May 2010, and that the 2010 904 Operating Manual was available to the public upon request at least as early as February 15, 2010. *Id.* (citing Ex. 1011 ¶¶ 19–26; Ex. 1010 ¶¶ 19–27; Ex. 1016 ¶ 17).

Petitioner argues that the facts of this case are similar to *In re Enhanced Security Research, LLC*, 739 F.3d 1347 (Fed. Cir. 2014) (“*Enhanced Security*”) holding that a manual for a software product was a “printed publication” because of a date inscription, a declaration by the CEO of the software company that members of the public showing an interest in buying or licensing the software product could have obtained the manual on request, advertisements of the product, and that the product was sold and installed with a dozen customers. *Id.* at 1354–55; Pet. 22; Reply 1–2.

3. *Summary of Patent Owner’s Contentions*

Patent Owner argues that Petitioner’s showing is insufficient because the 904 Operating Manuals were subject to confidentiality agreements. Resp. 10–14 (citing Ex. 1005, 2; Ex. 1009, 2). Particularly, Patent Owner contends that inscriptions in the 2006 and 2010 904 Operating Manuals required that they could not be “transferred in any way.” Patent Owner further

argues that Petitioner’s General Sales and Delivery Terms and Conditions (“Terms and Conditions”) prohibited distribution of the 2006 and 2010 904 Operating Manuals without consent. Resp. 12–13 (citing Ex. 2001, Section X.1).

Furthermore, Patent Owner contends that there was an expectation of confidentiality of product manuals in the industry. Resp. 14–18 (citing Ex. 2002 ¶¶ 3–8). Patent Owner contends that its assertion is supported by its own sales contracts as well as those of others in the industry. *Id.* at 15–17 (citing Ex. 2003 § 7; Ex. 2004 § 1.2; Exs. 2005–2013). Patent Owner argues that the evidence shows that customers treated the 2006 and 2010 904 Operating Manuals as confidential, in one instance storing them in a locked and caged room inside a larger facility requiring separate key-card access. *Id.* at 17 (citing Ex. 2018, 36:2–37:4).

Patent Owner asserts the 2006 and 2010 904 Operating Manuals were not “otherwise made available” to skilled artisans. Resp. 18–23. Specifically, Patent Owner contends that Petitioner “has not shown it had a policy to provide the 2006 and 2010 904 Operating Manuals upon request to “interested persons.” *Id.* at 19–20 (citing Ex. 1010 ¶ 21). Patent Owner also contends that “interested persons” would have found the price of a 904 slicer to be prohibitively high and therefore practically inaccessible. *Id.* at 21–23. Patent Owner further asserts that Petitioner did not show that any of the customers that received access to the 2006 and 2010 904 Operating Manuals were “persons interested and ordinarily skilled in the subject matter or art.” *Id.* at 22 (citing *Acceleration Bay, LLC v. Activision Blizzard Inc.*, 908 F.3d 765, 772 (Fed. Cir. 2018)).

Patent Owner contends the facts of this case are more similar to *Cordis Corp. v. Boston Sci. Corp.*, 561 F.3d 1319, 1333 (Fed. Cir. 2009) than they are to *Enhanced Security*, the case on which Petitioner relies. Resp. 7–8. *Cordis* held that limited distribution can make a work publicly accessible, but “a binding agreement of confidentiality may defeat a finding of public accessibility,” and that professional and behavioral norms may establish a reasonable expectation that information will not be copied or further distributed. *Acceleration Bay*, 561 F.3d at 1333.

4. *Analysis*

“[W]here a distribution is made to a limited number of entities, a binding agreement of confidentiality may defeat a finding of public accessibility.” *Cordis*, 561 F.3d at 1333. We first consider whether the 2006 and 2010 904 Operating Manuals were distributed to a limited number of entities. The Petition evidence shows that distribution of the 2006 904 Operating Manual was made to seven unique customers in the United States (Ex. 1016 ¶ 19), and that distribution of the 2010 904 Operating Manual was made to three unique customers worldwide (Ex. 1011, Appendix G) from October 2007 to May 2010. Pet. 19–21; Resp. 9; Paper 8, 13–14, 16–17 (Preliminary Response); Ex. 1011 ¶¶ 16, 19; Ex. 1016 ¶ 19. Accordingly, the 2006 and 2010 904 Operating Manuals were distributed to ten unique entities.

Petitioner indicates it sold 49 slicers worldwide, which would have been accompanied by paper and electronic copies of the 2006 904 Operating Manual (Pet. 20 (citing Ex. 1011 ¶ 15; Ex. 1010 ¶ 15) and that

it sold an additional five slicers, which would have been accompanied by copies of the 2010 904 Operating Manual (Pet. 23 (citing Ex. 1011 ¶¶ 19–26; Ex. 1010 ¶¶ 19–27)). The Petition appears to focus more on the *numbers* of 2006 and 2010 904 Operating Manuals distributed whereas *Cordis* is concerned with whether a limited number of *entities* received product manuals. 561 F.3d at 1333.

At the hearing, Petitioner contended that the 2006 904 Operating Manual was disseminated to 36 unique entities before the critical date. Tr. 6. Petitioner does not show, however, where this number is supported in the record. Rather, as noted above, the record shows that the 2006 and 2010 904 Operating Manuals were distributed to ten unique entities.

From the evidence presented in the Petition, under *Cordis*, Petitioner has not shown that the distribution of the 2006 and 2010 904 Operating Manuals was to more than a “limited number of entities.” Petitioner relies on *Enhanced Security*, but that case involved distribution to a dozen customers, which is slightly more than the Petition evidence in this case or in *Cordis*. Petitioner does not show that distribution of the 2006 and 2010 904 Operating Manuals to ten unique customers exceeds a “limited number of entities” under the circumstances presented here. Consequently, following *Cordis*, we proceed to consider the matter of confidentiality.

Petitioner relies on its expert and employees in asserting that the 2006 and 2010 904 Operating Manuals were publicly available and not confidential. Pet. 18–24; Ex. 1003 (Richard Hooper) ¶¶ 53–68; Ex. 1010 (Jörn Schreiber) ¶¶ 2–27; Ex. 1011 (Carsten Reisz) ¶¶ 2–26; Ex. 1016 (Frank Rypel) ¶¶ 2–30; Ex. 1060 (Timo Rotter) ¶¶ 2–46; Ex. 1061 (Theodor Horst)

¶¶ 2–15. These declarants testify about shipping copies of the 2006 and 2010 904 Operating Manuals along with slicer machines to customers. Ex. 1010 ¶ 4; Ex. 1011 ¶ 4; Ex. 1016 ¶ 7; Ex. 1060 ¶¶ 7–9. They also testify that the 2006 and 2010 904 Operating Manuals were not confidential and were freely available upon request. Ex. 1010 ¶ 21; Ex. 1011 ¶ 20; Ex. 1060 ¶ 4.

Patent Owner points to inscriptions in the 2006 and 2010 904 Operating Manuals and contends they conflict with the declarants’ testimony concerning the confidential status of the 2006 and 2010 904 Operating Manuals. Resp. 10–14. The 2006 904 Operating Manuals bear the following inscription:

© WEBER Group

Without the written authorisation of the WEBER Group, neither the operating manual nor any portion thereof may be reproduced or transferred in any way. The user may copy the operating manual for internal use or print it from CD.

Ex. 1005, 2. The 2010 904 Operating Manuals bear a similar inscription. Ex. 1009, 2.

Effectively, the inscriptions require confidentiality because no portion of the 2006 and 2010 904 Operating Manuals may be “transferred in any way” without “the written authorisation” of Petitioner. Further, the user’s copying of the 2006 and 2010 904 Operating Manuals is limited “for internal use” meaning it cannot be disclosed outside of the receiving entity. By their plain language, the inscriptions require the recipient to keep the 2006 and 2010 904 Operating Manuals in confidence.

We also agree with Patent Owner that confidentiality is required by Petitioner’s Terms and Conditions covering sales of 904 slicers. Resp. 12–13

(citing Ex. 2001). The Terms and Conditions read as follows:

X. Intellectual Property Rights

1. Cost estimates, drafts, drawings and other documents remain the property of Seller. The comprehensive copyright with all associated rights to all documents and information transferred during the contractual relationship belongs exclusively to Seller, even if these objects were created based on specifications or assistance from Buyer. Such objects may only be made accessible to third parties with the consent of Seller. Drawings and other documents associated with the offers are to be returned immediately upon request or if the order is not granted.

Ex. 2001 § X.1. Thus, according to the Terms and Conditions, Petitioner (as “Seller”) maintains proprietary rights in all documents (including the 2006 and 2010 904 Operating Manuals) transferred to a customer (i.e., “Buyer”), and the customer may only make the documents accessible to third parties with Petitioner’s consent. Furthermore, immediate return of documents is required if an order is not granted. In other words, the Terms and Conditions restrict transfer of documents outside of the recipient and in essence constitute a confidentiality agreement.

Petitioner’s declarant testifies that the documents referenced in the Terms and Conditions refer to pre-sale documents only, and that Petitioner’s practice was to mark such documents “confidential” to indicate they were to be subject to confidentiality restrictions of the Terms and Conditions. Ex. 1060 ¶ 16. The Terms and Conditions, however, do not mention anything about confidential and non-confidential

classes of documents or marking documents “confidential.” Instead, they cover “all documents and information transferred during the contractual relationship.” Ex. 2001 § X.1. Petitioner has not explained adequately how the alleged different classes of documents or its practice of marking documents “confidential” might be consistent with its Terms and Conditions.

We further observe that Petitioner’s evidence that the 2006 and 2010 904 Operating Manuals were not confidential stems primarily from the testimony of its employees, each of whom have an interest in the outcome of this case because of their work relationship with Petitioner. Ex. 1010; Ex. 1011; Ex. 1016; Ex. 1060; Ex. 1061.

Furthermore, when a declarant’s testimony conflicts with documentary evidence, such as the confidentiality provisions contained in the 2006 and 2010 904 Operating Manual inscriptions and the Terms and Conditions (Ex. 1005, 2; Ex. 1009, 2; Ex. 2001, Section X.1), we lean toward drawing our conclusions from the documentary evidence. *U.S. v. U.S. Gypsum Co.*, 333 U.S. 364, 395–396 (1948) (rejecting testimony in conflict with documentary evidence). This is because the documentary evidence was prepared contemporaneously in the normal course of business, whereas the declarants’ testimony has been given retrospectively with litigation in mind.

Petitioner introduces the testimony of a customer’s employee, Mr. David Frett, who states that he received 2006 and 2010 904 Operating Manuals along with shipments of 904 slicers from Petitioner at the customer’s plant facilities. Ex. 1017 ¶¶ 3–10. He testifies that the 2006 and 2010 904 Operating Manuals were kept in the maintenance shop library of

customer's plant facility. *Id.* ¶ 4. At his deposition, he indicated that entry into the plant facility required an access badge. Ex. 2018, 30:20–32:11. He referred to the library within the facility as a “maintenance crib”—a wire cage and locked door accessible only by certain employees. *Id.* At 33:17–41:8. He testifies that he was not aware of anyone that was not an employee of the customer requesting access to the library, and that the library was not available to the public. *Id.* at 41:5–43:12.

Mr. Frett's testimony establishes that the particular customer he worked for did not treat the 2006 and 2010 904 Operating Manuals as publicly accessible, but maintained them under at least two layers of security requiring badge access and a key to unlock the door of a caged room (“crib”) housing the 2006 and 2010 904 Operating Manuals. Mr. Frett further establishes that only certain employees were permitted to access the 2006 and 2010 904 Operating Manuals. Mr. Frett is the only person on record to testify on behalf of a purchaser of a 904 slicer.

Petitioner's employees testify that 904 slicers were shipped to trade shows along with copies of the documentation, including the 2006 904 Operating Manual. Reply 8; Ex. 1060 ¶¶ 35–38; Ex. 1061 ¶¶ 5–6. Petitioner's employees testify that “customers and other interested persons” (including potential customers, suppliers, service partners, installers, secondary market purchasers, and academics or students conducting research) attend trade fairs, and that they are permitted to view documentation, including the 2006 904 Operating Manual, upon request. Ex. 1060 ¶ 39; Ex. 1061 ¶¶ 5, 7. Petitioner's employees testify that they would show the 2006 904 Operating Manual two to five times per day at every

trade fair that Petitioner attended. Ex. 1060 ¶ 39; Ex. 1061 ¶ 7. Mr. Horst recalls one instance in which he showed the 2006 904 Operating Manual to a potential customer at a tradeshow who later bought a 904 slicer. Ex. 1061 ¶ 10. Petitioner's employees also testify that Petitioner would permit viewing of the 2006 and 2010 904 Operating Manuals upon request of a visiting customer or other interested person at Petitioner's factory demonstration rooms. Ex. 1060 ¶¶ 42–44; Ex. 1061 ¶¶ 13–15.

The Petition contains no mention of showing the 2006 and 2010 904 Operating Manuals at trade shows or demonstration rooms, and the first time this evidence was mentioned was in the Reply. Reply 4, 8. We note that Exhibits 1060 and 1061 exceed the proper scope of a Reply as required under 37 C.F.R. § 42.23(b), and we, therefore, do not have to consider this evidence.

Nevertheless, even if we were to consider the evidence, we find it insufficient to establish that the 2006 and 2010 904 Operating Manuals were accessible to the interested public. Specifically, the evidence concerning trade shows and demonstration rooms contradicts other evidence on this record. For example, Patent Owner contends that only customers, and not the general public, attended Petitioner's events at trade shows and demonstration rooms. Sur-Reply 9 (citing Ex. 2029, 54:16–55:11 (cross-examination of Theodor Horst)). Patent Owner asserts that Petitioner's showrooms were open to customers by invitation only. *Id.* (citing Ex. 2029, 79:19–80:2). Patent Owner further contends Petitioner's evidence is the “say-so” of its witnesses, and that Petitioner has not shown that the manuals shown at trade fairs had the same disclosure as the

2006 and 2010 904 Operating Manuals on which Petitioner relies in this case. *Id.* (citing Ex. 2029, 33:3–8, 27:14–21). We agree with Patent Owner that these considerations undermine Petitioner’s proffered evidence.

We further observe that Petitioner does not indicate which parts, if any, of the 2006 and 2010 904 Operating Manuals were shown to “customers and other interested persons” at trade fairs and demonstration rooms. Particularly, Petitioner does not indicate that customers were shown the features of the 904 slicers that are in issue in this case. There is no evidence that any 2006 or 2010 904 Operating Manual was ever freely given out to any attendee or visitor. Moreover, the confidentiality restrictions in the 2006 and 2010 904 Operating Manuals contradict Petitioner’s assertions that the Manuals were freely available for inspection by attendees of the trade shows or demonstration rooms. Consequently, even if we could consider Petitioner’s new evidence, it would be insufficient to establish that the 2006 and 2010 904 Operating Manuals used in Petitioner’s challenges were publicly available.

Petitioner’s declarant, Mr. Horst, indicates that a former intern with Petitioner who later became a university student requested to use the 2006 904 Operating Manual for supporting references in a thesis, and that the student was able to get a release from Petitioner to use excerpts from the 2006 904 Operating Manual in his thesis. Ex. 2029, 72–75. Petitioner’s declarant indicates that Petitioner had a standing policy “that documentation, regardless or type, there has to be a release before it leaves the company, before it’s given out.” Ex. 2029, 74. What excerpts those were; their relevance, if any, to the

features Petitioner relies upon here; and what restrictions of confidentiality, if any, applied to the intern-student because of his former employment with Petitioner, are not explained in the record. Consequently, this evidence is of little value in determining public accessibility of the 2006 and 2010 904 Operating Manuals.

Enhanced Security held that advertising of a product had some bearing on determining that the corresponding manual was publicly available. *Enhanced Security*, 739 F.3d at 1355. Petitioner states that there was publicity, such as advertising and magazine articles, surrounding the release of the 904 slicer. Pet. 22 (citing Ex. 1011 ¶ 13). The advertisement cited contains no mention of an operating manual or its availability. Ex. 1011, 893–898 (Appendix E).

In any case, a major difference that distinguishes the facts presented here from *Enhanced Security* is the confidentiality provisions contained in the 2006 and 2010 904 Operating Manuals and the Terms of Conditions. Ex. 1005, 2; Ex. 1009, 2; Ex. 2001 § X.1. No such confidentiality restrictions were present in *Enhanced Security*.

Cordis states that “[w]here professional and behavioral norms entitle a party to a reasonable expectation” that information will not be copied or further distributed, “we are more reluctant to find something a “printed publication.”” *Cordis*, 561 F.3d at 1333–34 (citing *Klopfenstein*, 380 F.3d at 1351). Patent Owner contends that evidence shows there was an expectation of confidentiality for product manuals in the industry. Resp. 14–18.

Patent Owner's declarant, Mr. Scott Scriven, works for Patent Owner as its Executive Vice President. Ex. 2002 ¶ 1. He was formerly employed by Petitioner at its Kansas City, Missouri location from 1999 to 2013, and was its President from 2006 to 2010. *Id.* ¶ 2. Mr. Scriven testifies that at the time the 2006 and 2010 904 Operating Manuals were written and distributed, there was an expectation of confidentiality in the industry. Resp. 14 (citing Ex. 2002 ¶¶ 5–8). He testifies that Petitioner would only provide product manuals to customers. *Id.* at 14–15. He further testifies that he is aware of no instance in which a potential customer, supplier, service partner, installer, secondary market purchaser, or academic requested and received a copy of the 2006 or 2010 904 Operating Manual. *Id.* (citing Ex. 2002 ¶ 3). Patent Owner further indicates that the sales contracts of competitors in the industry had terms and conditions similar to Petitioner's, requiring confidentiality of technical product information, including product manuals. *Id.* at 15–18 (citing Ex. 2003 § 7; Ex. 2004 § 1.2; Exs. 2005–2013).

The security measures that Petitioner's customer used to protect confidentiality of the product manuals, such as locking them inside of a caged room in a facility that could only be accessed with a security badge, also tends to show that the industry recognized the product manuals to be confidential information. *Id.* at 17 (citing Ex. 2014, 76:4–77:6; Ex. 2018, 36:2–37:4).

Further, when asked if he had ever seen a competitor's operating manual for one of its products, Petitioner's declarant, Mr. Horst, testified that he had not seen one in 31 years of working for Petitioner. Ex. 2029, 15, 88–89. The evidence supports Patent

Owner's contention that there was an industry norm to require confidentiality of product manuals for equipment sold to customers.

Kyocera established that the applicable audience for determining whether a document is a printed publication is "persons interested and ordinary skilled in the subject matter or art." *Kyocera*, 545 F.3d at 1350. Petitioner's declarants contend that this category of individuals includes potential customers, suppliers, service partners, installers, secondary market purchasers, and academics and students conducting research. Ex. 1060 ¶ 39; Ex. 1061 ¶ 7. Petitioner has overstated individuals that constitute "persons interested and ordinary skilled." At best, Petitioner's evidence relates to customers, an installer, and a student. There is no evidence that the remaining categories constitute "persons interested and ordinary skilled" for purposes of gauging Petitioner's evidence of public accessibility of the 2006 and 2010 904 Operating Manuals, which is Petitioner's burden to carry.

For the forgoing reasons, we conclude that the Petition does not show by a preponderance of the evidence that the 2006 and 2010 904 Operating Manuals were printed publications. The 2006 and 2010 904 Operating Manuals' inscriptions provided for confidentiality of the information contained in them, and Petitioner's Terms and Conditions reinforce that the Manuals were confidential, and to be held in confidence by customers who bought 904 slicer machines from Petitioner. As all grounds depend critically on the 2006 and 2010 904 Operating Manuals, and Petitioner has not shown the remaining prior art discloses all of the features of the claims of the '436 Patent, the Petition does not show

unpatentability by a preponderance of the evidence of any claim. Nonetheless, for the sake of completeness, we will address Petitioner's obviousness challenges in a subsequent section.

D. *Lindee*

Lindee describes a high speed slicing machine for two or more food loaves. Ex. 1006, codes (54), (57). Lindee's high speed slicing machine supports first and second food loaves for movement along parallel loaf paths into a slicing station where both loaves are sliced by a cyclically driven knife blade, the slices being stacked or shingled in groups on a receiving conveyor located below the slicing station. *Id.* Figure 3 is reproduced below:

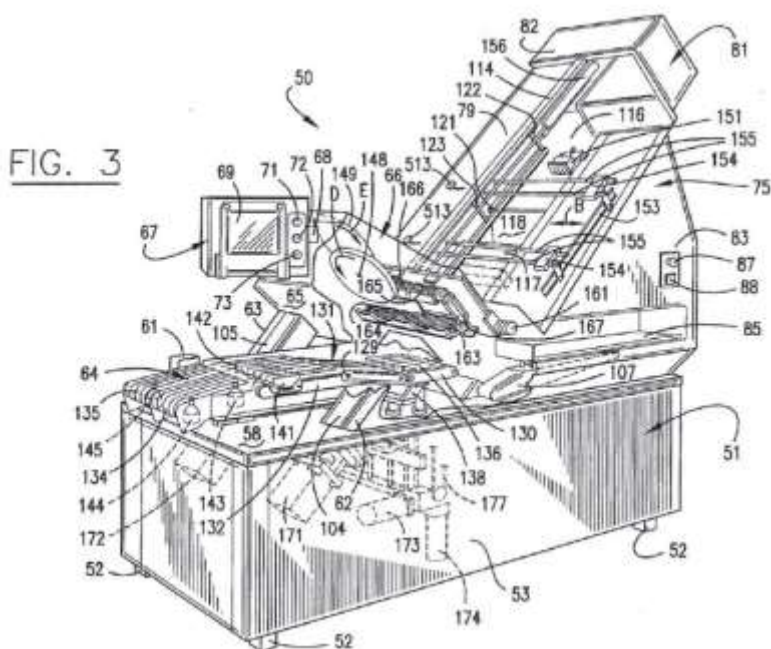


Figure 3 illustrates Lindee's slicing machine. *Id.* at 3:20–33.

Slicing machine 50 in Lindee’s Figure 3 includes, *inter alia*: a slicing station 66; a knife blade 149; a loaf feed mechanism 75 which includes a manual feed from a right-hand (far) side of the machine and an automated feed from the left-hand (near) side of the machine; and a near-side clamp or gripper mechanism 151, with a similar gripper mechanism at the far side of slicing machine. *Id.* at 4:4–8:5. Lindee’s slicing machine combines manual and automated mechanisms to load food loaves onto the food paths. *Id.*, code (57). The machine’s grippers, one on each loaf path, grip the end of a loaf remote from the slicing station, and for each gripper, a loaf feed drive impels the gripper toward the slicing station and then moves the gripper back to a home position, releasing an unsliced loaf butt on the way through a door opening in the loaf support. *Id.*

V. ANALYSIS OF GROUNDS

A. *Legal Standards for Obviousness*

In *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966), the Supreme Court set out a framework for assessing obviousness under § 103 that requires consideration of four factors: (1) the “level of ordinary skill in the pertinent art,” (2) the “scope and content of the prior art,” (3) the “differences between the prior art and the claims at issue,” and (4) “secondary considerations” of nonobviousness such as “commercial success, long felt but unsolved needs, failure of others, etc.” *Id.* at 17–18; *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 407 (2007). We discussed the first *Graham* factor in Section II and the second *Graham* factor in Section IV. The record includes no evidence or arguments relating to the fourth *Graham* factor. We address the third *Graham* factor in the obviousness analysis and conclusion below.

B. Ground 1: Obviousness Based on the 2006 904 Operating Manual and Lindee

1. Claim 1

In this discussion, we focus on the limitations of claim 1 that are dispositive of this case.

a) “disposed over”

Petitioner contends that the 2006 904 Operating Manual and Lindee each disclose limitation [1.1] of claim 1 reciting “a food article loading apparatus with a lift tray assembly for moving food articles from a staging position to an elevated position at a beginning of a food article feed path.” Pet. 30–33.

As supporting evidence, Petitioner relies on Figure 5 of the 2006 904 Operating Manual, shown below. *Id.* at 31.

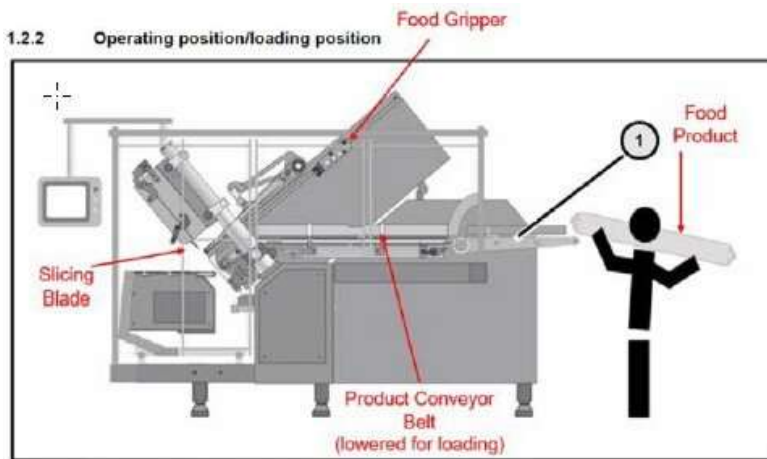


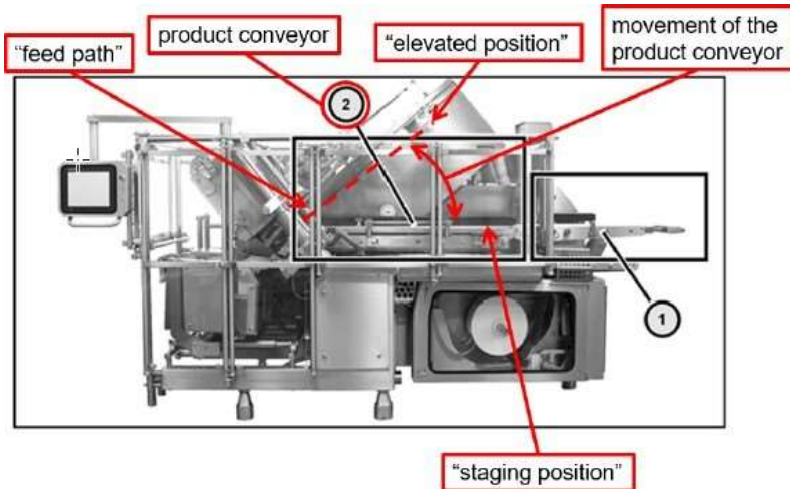
Fig. 5 Operating position/loading position

EX1005, FIG. 5 (annotated).

Figure 5 of the 2006 904 Operating Manual is illustrated above as annotated by Petitioner to show the slicer machine with product conveyor lowered for loading with food product. Pet. 31; Ex. 1005, 14, Fig. 5.

In Figure 5 above, Petitioner's annotations in red show food product being loaded onto a timing belt. The timing belt (element 1 in the figure) feeds food product to a product conveyor belt that has been lowered for loading, as shown in red annotation. Also indicated in red annotation are the food gripper and slicing blade.

Petitioner further presents an annotated version of Figure 14 of the 2006 904 Operating Manual shown below. *Id.* at 32.



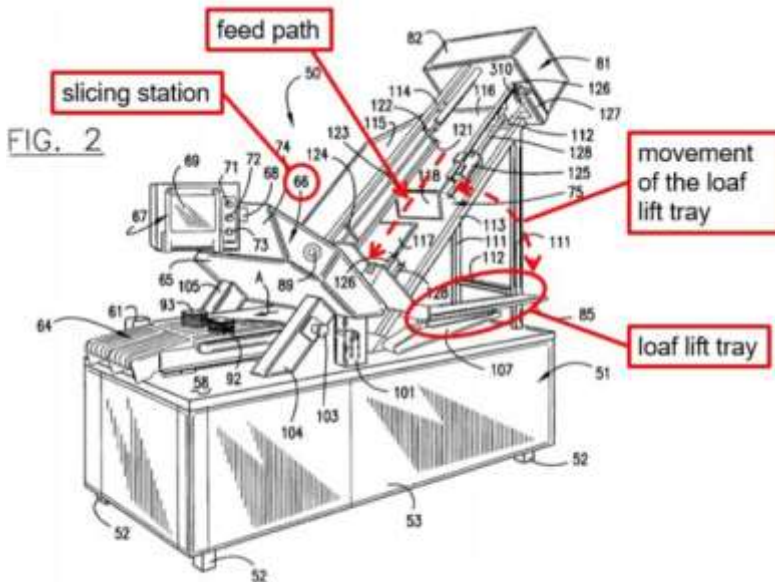
EX1005, FIG. 14 (annotated).

Petitioner's annotated Figure 14 above shows the product conveyor and how it moves from staging position to elevated position to feed the food product along a feed path to the slicer. Pet. 32 (citing Ex. 1005, 25, Fig. 14).

Petitioner contends that in the 2006 904 Operating Manual, the combination of the product conveyor belt, the timing belt, and related actuators and supporting structure disclose the claimed “food article loading apparatus” because these elements work together to load food articles into the feed path for slicing. Pet. 32 (citing Ex. 1003 ¶ 101; Ex. 1005, 10, Fig. 1).

Petitioner also contends that Lindee discloses a lift tray and corresponding actuators and support structure that constitute the claimed “food article loading apparatus” because they move food articles from a staging position to an elevated position” as claimed. Pet. 33 (citing Ex. 1006, 4:61–5:5, 5:63–6:2, Figs. 1–2; Ex. 1003 ¶¶ 103–105).

Lindee’s Figure 2 is reproduced below as annotated by Petitioner’s expert, Dr. Richard Hooper. Pet. 33 (citing Ex. 1003 ¶ 103).



EX1006, FIG. 2 (annotated).

Lindee's Figure 2, annotated by Dr. Hooper, to show the loaf lift tray 85 moving from the staging position to the elevated position at the beginning of the food article feed path to the slicing station 66. Ex. 1003 ¶ 103.

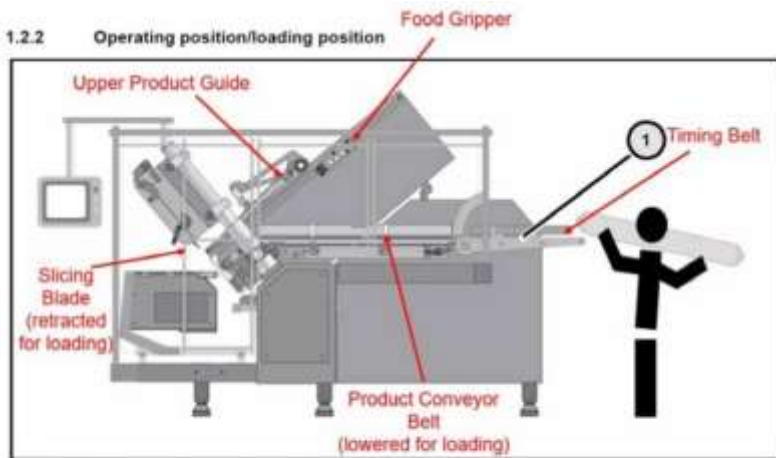
In Lindee's Figure 2, above, the lift tray 85 is initially in the staging position to receive loaves of food articles. Pet. 33 (Ex. 1003 ¶ 103). The lift tray 85 is then raised with mechanism 107 that pivots the tray to the elevated position where the loaves are moved laterally by the loaf feed mechanism 75 and positioned at the beginning of the feed path to the slicing station 66. *Id.* Petitioner contends that the lift tray 85 and its corresponding actuators and support structure (including mechanism 107) constitute the claimed "food article loading apparatus" because they move food articles from a staging position to an elevated position, as claimed. *Id.* (citing Ex. ¶¶ 103–105).

Petitioner contends that the 2006 904 Operating Manual and Lindee together disclose limitation [1.2] of claim 1 of "a food article feed apparatus *disposed over* the food article loading apparatus having an upper conveyor assembly with a driven endless conveyor belt used in cooperation with a food article gripper for moving the food articles along the food article feed path." Pet. 33–38 (emphasis added).

Petitioner contends that the 2006 904 Operating Manual discloses the part of limitation [1.2] of claim 1 reciting "a food article feed apparatus disposed over the food article loading apparatus . . . with a food article gripper." Pet. 33. Petitioner contends that the 2006 904 Operating Manual discloses that a "product holder grips the loaded product and guides it to the slicing area." Pet. 34 (citing Ex. 1005, 23, 40, Fig. 12).

According to Petitioner, the product holder works together with the “upper product guide” to guide food to the slicing blade. Pet. 34 (citing Ex. 1005, 22, 40; Ex. 1003 ¶ 107). Petitioner contends the upper product guide is a conveyor belt that presses down on the food article from above and helps transport the food article toward the slicer blade. *Id.* at 34–35 (Ex. 1005, 15, 40; Ex. 1003 ¶ 107).

Petitioner relies on Figure 5 of the 2006 904 Operating Manual, reproduced below, as disclosing the mentioned features. Pet. 35.



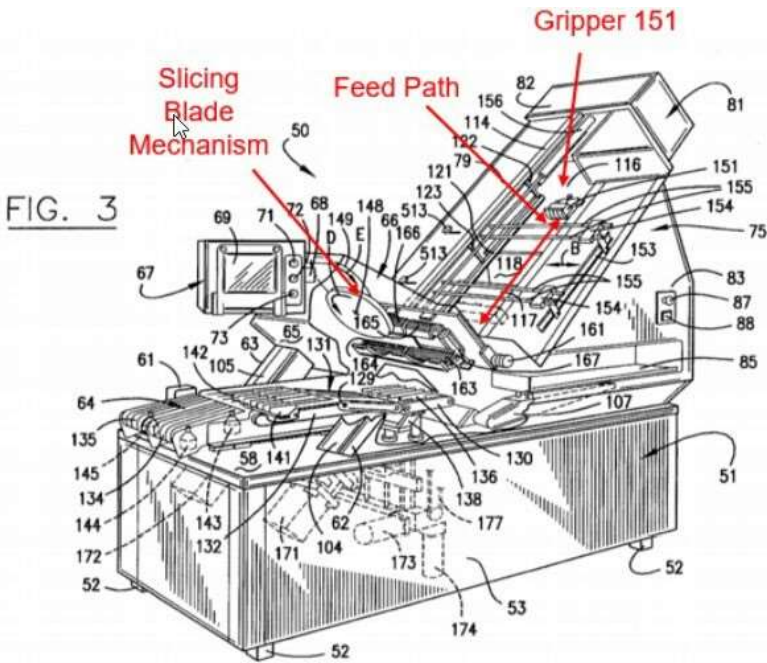
EX1005, FIG. 5 (annotated).

Figure 5 of the 2006 904 Operating Manual, shown above as annotated in red by Petitioner, shows the timing belt, product conveyor, food gripper, upper product guide, and slicing blade. Ex. 1005, 14, Fig. 5.

Petitioner contends that the product holder, upper product guide, and related actuators form the claimed “food article feed apparatus” because they function to feed the food to the slicing blade. Pet. 35. Petitioner

contends elements of the food article feed apparatus (the product holder and upper product guide) are located above the food article load apparatus (comprising the product bed conveyor and timing belt). Pet. 35 (citing Ex. 1003 ¶ 107). Petitioner contends the 2006 904 Operating Manual discloses that the food article feed apparatus is thus disposed “over” the food article loading apparatus. *Id.*

Petitioner contends that Lindee discloses the part of limitation [1.2] of claim 1 reciting “a food article feed apparatus . . . having an upper conveyor assembly with a driven endless conveyor belt used in cooperation with a food article gripper for moving the food articles along the food article feed path.” Pet. 36. Petitioner contends Lindee discloses a food slicer that uses a food gripper mechanism to grip food products and advance the products down an inclined support surface to a slicing blade. Pet. 36 (citing Ex. 1006, 8:65–9:46; Ex. 1003 ¶ 109). To illustrate these features, Petitioner relies on Lindee’s Figure 3 below. *Id.*

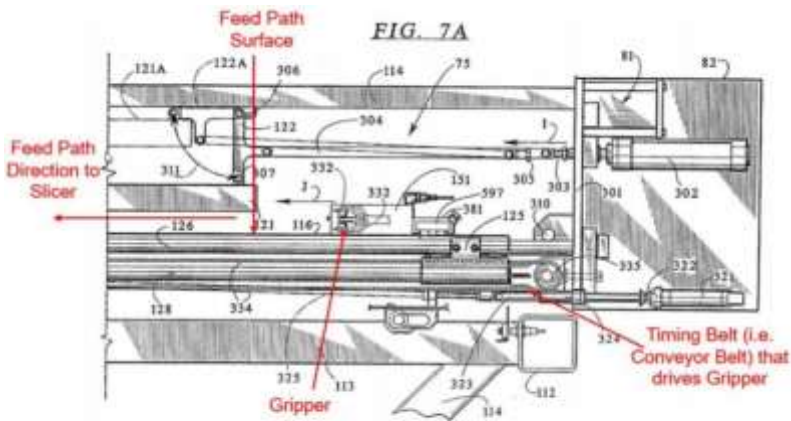


EX1006, FIG. 3 (annotated).

Lindee's Figure 3 above is annotated by Petitioner to show the gripper, feed path, and slicing blade mechanism. Pet. 36 (citing Ex. 1006, Fig. 3).

In Lindee's Figure 3 above, Petitioner annotates in red the gripper 151, feed path, and slicing blade mechanism. *Id.*

Petitioner also relies on Lindee's Figure 7A, reproduced below. Pet. 37.



EX1006, FIG. 7A (annotated).

Lindee's Figure 7A is annotated in red by Petitioner to show the timing belt, gripper, feed path surface, and feed path direction to slicer. Ex. 1006, Fig. 7A.

Petitioner contends Lindee discloses that the food grippers are driven along the feed path by timing belt 334. Pet. 36 (citing Ex. 1006, 18:32–35, 19:55–67). In Lindee's Figure 7A, Petitioner contends gripper 151 is mounted on extension 597 of carriage 125 which is connected to the upper run of timing belt 334. *Id.* at 36–37 (citing Ex. 1006, 18:18–22, 18:33–34). Petitioner contends the gripper is connected to and supported by carriage 125 which slides along shafts 126 and 128 as timing belt 334 carries carriage 125 along the feed path. Pet. 37 (citing Ex. 1003 ¶¶ 110–111). Petitioner further contends that the timing belt is stretched between idler sprocket 335 and drive sprocket 180, and defines an endless conveyor belt. *Id.* (citing Ex. 1006, 18:34–37; Ex. 1003 ¶ 110). Petitioner contends that the foregoing excerpts of Lindee disclose “a food article feed apparatus . . . having an upper conveyor assembly with a driven endless conveyor belt used in cooperation with a food article gripper for

moving the food articles along the food article feed path” in limitation [1.2] of claim 1. Pet. 37–38 (citing Ex. 1003 ¶ 112).

Petitioner contends a person of ordinary skill in the art would have been motivated to combine Lindee’s timing belt gripper actuation system into the 2006 904 Operating Manual to provide mechanical details to achieve the disclosed function of the product holder (feeding the food loaves into the slicer). Pet. 44 (citing Ex. 1003 ¶ 137). Petitioner also contends the 2006 904 Operating Manual and Lindee are similar systems (Pet. 45); that the combination would have been simple substitution of one known element for another (Pet. 45–46); and use of a known technique to improve a similar device (Pet. 46). Petitioner further contends that a person of ordinary skill in the art would have been motivated to add Lindee’s conveyor system into the upper portion of the 2006 904 Operating Manual’s slicer because that is where the track is to support the product holder (Pet. 46–47).

Patent Owner contends that the combination of the 2006 904 Operating Manual and Lindee fail to teach or suggest limitation [1.2] of “a food article feed apparatus *disposed over* the food article loading apparatus having an upper conveyor assembly with a driven endless conveyor belt used in cooperation with a food article gripper for moving the food articles along the food article feed path.” Resp. 45–49; Sur-Reply 16–18 (emphasis added). Specifically, limitation [1.2] of claim 1 requires that the feed apparatus has a conveyor belt, and that the conveyor belt must be “disposed over” the loading apparatus. Patent Owner argues that in Petitioner’s combinations (*see* Section 1.F), Lindee’s conveyor belts are offset to the side of, and not “disposed over,” the loading apparatus, which,

according to Petitioner, includes Lindee’s lift tray and corresponding actuators and support structure (Pet. 33), and the product bed conveyor and timing belt of the 2006 904 Operating Manual (Pet. 35). Resp. 45–49. In addition, Patent Owner contends Petitioner’s combinations result in conveyor belts that are out the feed path, contrary to limitation [1.1] of claim 1 reciting “a food article loading apparatus with a lift tray assembly for moving food articles from a staging position to an elevated position at a beginning of a food article feed path.” *Id.*

Patent Owner’s contentions are supported by its expert, Dr. Howard, who testifies that one of ordinary skill in the art would not have combined Lindee’s lower timing belt system with the upper system disclosed in the 2006 904 Operating Manual. Ex. 2019 ¶¶ 120–129. Dr. Howard states that Petitioner’s expert, Dr. Hooper, bases his obviousness analysis on the incorrect assumption that the 2006 904 Operating Manual does not disclose how the product holders are translated along the feed path, when in fact the 2006 904 Operating Manual discloses a ball screw assembly to perform this function. *Id.* at ¶ 99. He further contends that Petitioner does not identify any advantages or address the difficulties of using Lindee’s timing belt in the slicer disclosed in the 2006 904 Operating Manual. *Id.*

Dr. Howard testifies that in the slicer machine described in the 2006 904 Operating Manual, the ball screw actuator that drives the product holder is off to the side, and not disposed over the food article loading apparatus. Ex. 2019 ¶¶ 104–109.

To explain his opinion, he points to Figure 345 of the 2006 904 Operating Manual, reproduced below.

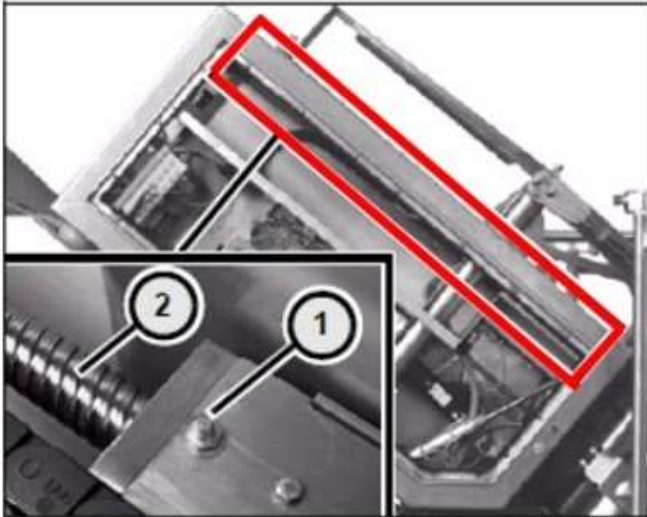


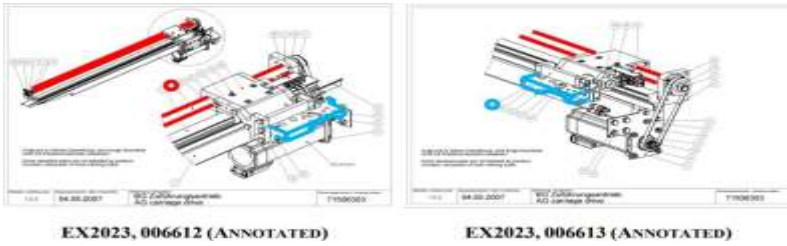
Fig. 345 Lubricating nipple of the ball screw spindle

EX1005, P. 273 FIG. 345 (ANNOTATED)

Patent Owner's annotated Figure 345 of the 2006 904 Operating Manual shows the location of the ball screw within the carriage housing. Ex. 2019 ¶ 104.

In Figure 345 above, Dr. Howard explains that the portion annotated in red is the location of the ball screw assembly within a carriage housing. Ex. 2019 ¶ 104 (citing Ex. 1005, 273, Fig. 345).

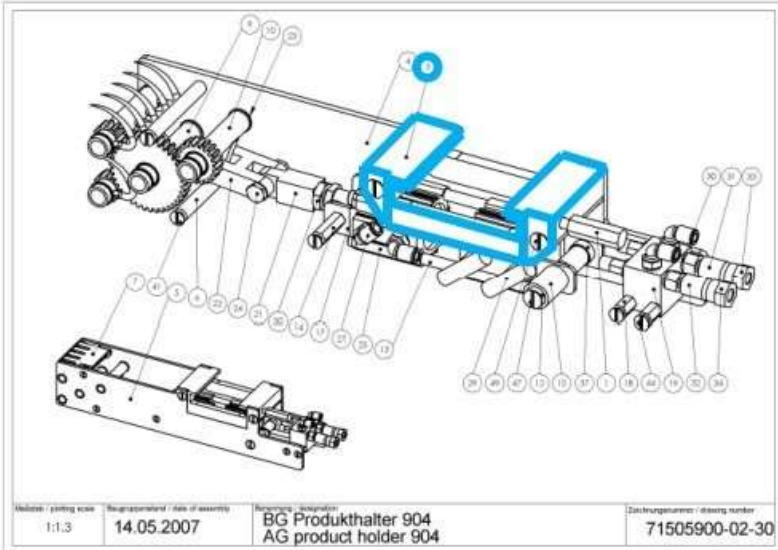
To explain how the ball screw translates a carriage connection to a rail supporting the product holders, Dr. Howard provides the following annotated figures from the 2006 904 Parts Manual (Ex. 2023).



Patent Owner's annotated Figures from the 2006 904 Parts Manual shows the ball screw (red) and carriage connection (blue). Ex. 2019 ¶ 107.

In the Figures above, the ball screw is annotated in red, and the carriage connection is annotated in blue. Ex. 2019 ¶ 107. The ball screw translates the connection along the length of the ball screw. *Id.*

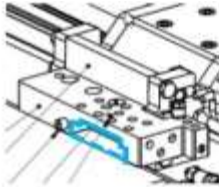
Dr. Howard further testifies that the 2006 904 Parts Manual discloses a product holder shown in the Figure below. *Id.*



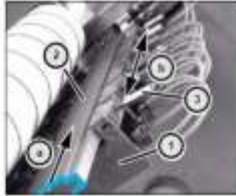
Patent Owner's annotated figure from the 2006 904 Parts Manual shows the clamping plate (blue) of the product holder. Ex. 2019 ¶ 107.

Dr. Howard explains that the figure above shows a clamping plate, annotated in blue, which clamps the product holder onto a support rail. *Id.*

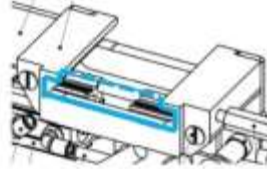
Dr. Howard testifies that a person of ordinary skill in the art would recognize that the shape of the support rail would fill the negative space of the carriage drive connection and the clamping plate of the product holder, as illustrated below. *Id.*



EX2023, 006613 (EXCERPT,
ANNOTATED)



EX1005, P. 118, FIG. 123
(ANNOTATED)



EX2023, 006727 (EXCERPT,
ANNOTATED)

Patent Owner's annotated figures from the 2006 904 Operating Manual and 2006 904 Parts Manual showing the carriage connection, rail, and clamping plate of product holder (annotated in blue). Ex. 2019 ¶ 107.

In the Figures above, the left figure is the carriage drive connection, the center figure shows the rail with product holder in place, and the right figure shows the clamping plate of the product holder. As the blue annotations show, these parts are shaped to fit together.

Dr. Howard's testimony establishes that the ball screw actuator which drives the product holder, is off to the side of the product holder and its feed path,

separated by the rail to which the product holder is clamped. The ball screw is also off to the side of the upper product guide and product bed conveyor corresponding to a slot in the carriage housing, as shown below in Figure 1 of the 2006 904 Operating Manual.

1.1.1 Loading area/infeed area

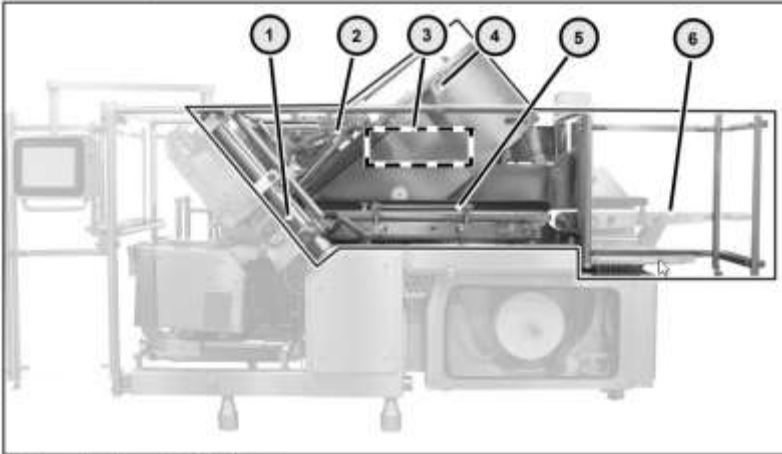


Fig. 1 Loading area/infeed area

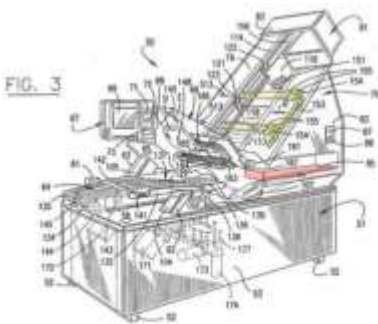
Figure 1 above from the 2006 904 Operating Manual shows various elements of the loading area of the 904 slicing machine. Ex. 1005, 10, Fig. 1.

In Figure 1 above, element 1 is the product bed conveyor; element 2 is the upper product guide; element 3 is the blank holder; element 4 is the product holder; element 5 is the product conveyor; and element 6 is the timing belt.

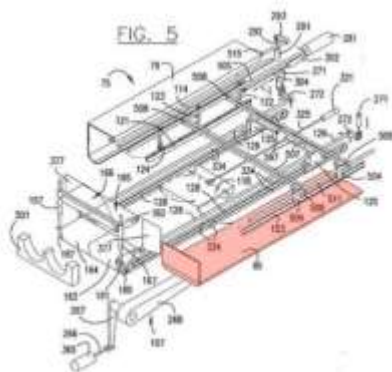
Petitioner's combination involves modifying the slicer of the 2006 904 Operating Manual with Lindee's timing belt system to replace the ball screw actuators of the 2006 904 Operating Manual. Pet. 44-47. Petitioner contends this modification would have been "a simple combination of known prior art elements

(i.e., [Lindee’s] timing belt actuation system and the 2006 904 [Operating Manual’s] product holder) to achieve predictable results (i.e., actuation of the product holder along the feed path).” *Id.* at 45. Petitioner also contends the combination would have been the simple substitution of Lindee’s timing belt system for the 2006 904 Operating Manual’s product holder actuation system. *Id.* at 45–46. Petitioner further contends the combination would have been the use of a known technique (use of Lindee’s conveyor actuation system to allow for different feed rates for each of the grippers) to improve a similar device (the 904 slicer’s grippers). *Pet.* 46. Petitioner further contends one would have been motivated to add Lindee’s conveyor system to the upper portion of the 2006 904 Operating Manual’s slicer that contains the track supporting the product holder. *Pet.* 46–47.

Dr. Howard explains that Lindee uses a sweep mechanism to push one or move loaves horizontally or laterally into the food article feed path of the slicing machine. *Ex.* 2019 ¶ 124. Dr. Howard provides annotated Figure 3 and Figure 5 from Lindee, shown below, to explain his opinion.



EX1006, FIG. 3 (ANNOTATED)



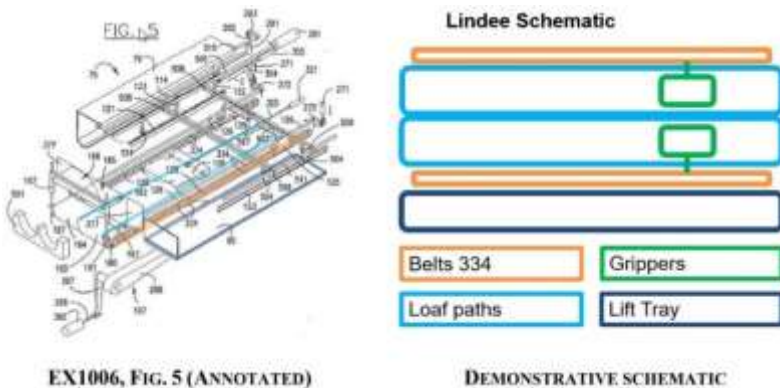
EX1006, FIG. 5 (ANNOTATED)

Lindee's Figure 3 and Figure 5 annotated by Dr. Howard to show the sweep mechanism and lift tray.
Ex. 2019 ¶ 124.

In Lindee's Figure 3, shown above, Dr. Howard highlights the sweep mechanism in yellow and the lift tray in red in its lowered position. Ex. 2019 ¶ 124. Dr. Howard also provides Lindee's Figure 5 to show the lift tray in its elevated position, disposed to the side of the feed path. *Id.*

Patent Owner notes that the background of the '436 Patent describes a slicer machine using a sweep mechanism (Ex. 1001, 1:63–65), and that the change to an in-line stack of components was an advantage recognized by the inventors (*id.* at 2:53–56). Sur-Reply 17. Thus, the '436 Patent distinguishes its invention over previous devices using a sweep mechanism like Lindee's.

Dr. Howard further provides the following illustrations to explain Lindee.



Lindee's Figure 5 and schematic of Figure 5 viewed from above illustrate timing belt 334 (orange), the loaf paths (blue), the lift tray 85 (dark blue), and the grippers (green). Ex. 2019 ¶ 125.

As shown in the above figures, Lindee’s timing belt 334 (part of the feed apparatus) (orange) is not “disposed over” the loading apparatus (lift tray) (dark blue) or over the feed path (blue). Ex. 2019 ¶ 125. Instead, Dr. Howard testifies that a person of ordinary skill in the art would understand that belt 334 driving the grippers in Lindee is located to the right of the feed path and to the left of the lift tray in Figure 5 annotated above.

Dr. Howard’s testimony makes clear that Lindee’s timing belt 334 (part of the feed apparatus) is not “disposed over” but is located to the side of the lift tray (part of the loading apparatus). Replacing the 2006 904 Operating Manual’s ball screw actuator with Lindee’s timing belt system would result in Lindee’s timing belt system being off to the side of the 2006 904 Operating Manual’s product conveyor according to the teachings of both references. Ex. 2019 ¶¶ 124–129.

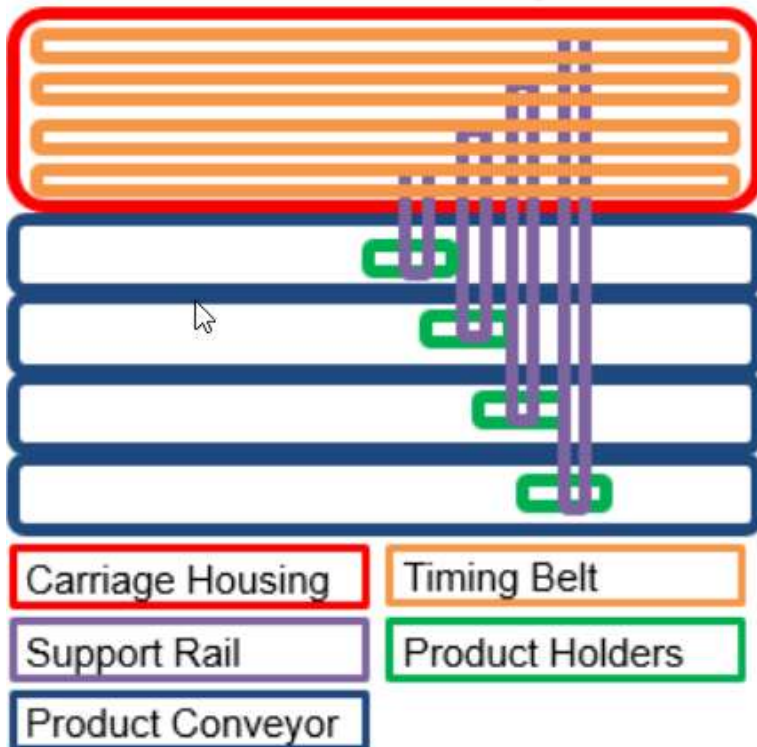
We have construed “food article feed apparatus disposed over the food article loading apparatus” in limitation [1.2] to mean that the feed apparatus (including Lindee’s timing belt system) must be “positioned above and in vertical and lateral alignment with” the food article loading apparatus (the 2006 904 Operating Manual’s product conveyor, timing belt, and related actuators and supporting structure). *See* Section III.C. Limitation [1.2] would not be satisfied if Lindee’s timing belt system was positioned off to the side of the 2006 904 Operating Manual’s product conveyor, timing belt, related actuators and supporting structure when used to replace or substitute for the 2006 904 Operating Manual’s ball screws.

Dr. Howard illustrates Petitioner’s combination resulting from combining known elements or simple

substitution of Lindee's timing belts for the 2006 904 Operating Manual's ball screws in the following figure.

Hypothetical Schematic

904 Manual + Lindee + Independent Feed



Patent Owner's demonstrative schematic shows the result of combining the teachings of the 2006 904 Operating Manual and Lindee together as viewed from above. Ex. 2019 ¶ 127.

In the schematic above, red indicates the carriage housing; orange indicates the timing belts (part of the asserted feed apparatus); purple indicates the support rails (part of the asserted feed apparatus); green indicates the product holders (part of the asserted feed

apparatus); and blue indicates the product conveyors (part of the asserted loading apparatus), as viewed from above. As shown, Lindee's timing belts replace the 2006 904 Operating Manual's ball screws in the carriage housing positioned to the side of the product conveyor. In this configuration, Lindee's timing belts (part of the asserted feed apparatus), are not "disposed over" the product bed conveyor (part of the asserted loading apparatus). Though positioned at a higher elevation than the product bed conveyor, Lindee's timing belts are not in vertical or lateral alignment with the product bed conveyor.

Consequently, the resulting configuration would not satisfy limitation [1.3] of claim 1 of "a food article feed apparatus disposed over said food article loading apparatus" under our construction of "disposed over" which requires that the food article feed apparatus and its upper conveyor assembly with conveyor belts and grippers (see limitation [1.2] of claim 1) are "positioned above and in vertical and lateral alignment with" the lift tray assembly of the food article loading apparatus. In the combination of the 2006 904 Operating Manual and Lindee, the feed apparatus including Lindee's timing belt system and grippers are not "disposed over" (i.e., "positioned above and in vertical and lateral alignment with") the loading apparatus including the product conveyor, timing belt, associated actuators, and supporting structure of the 2006 904 Operating Manual (*see* Pet. 32) or the lift tray and its actuators and support structure in Lindee (*see* Pet. 33)).

In the Reply, Petitioner proposes that one of ordinary skill in the art could extend the upper product guide of the 904 slicer and clamp grippers to the bottom run per Lindee's teachings. Reply 14.

However, no such modification was proposed in the Petition. *See* Pet. 32–33. We do not consider this new argument as it is not within the proper scope of Petitioner’s Reply. *See* 37 C.F.R. § 42.23(b); Consolidated Trial Practice Guide (“TPG”⁶), 73–75.

In addition, Petitioner does not explain how the extended upper product guide would drive the grippers independently according to Lindee, and also maintain downward pressure on the food product to facilitate even transport into the slicing area, which the 2006 904 Operating Manual teaches is the purpose of the upper product guide. Ex. 1005, 15, 23. In essence, Petitioner’s proposed modification requires the upper product guide to perform the two functions when it was designed for only one function without providing any detail to explain how modification for two functions would have been accomplished.

Petitioner argues against Patent Owner’s arguments that putting Lindee’s belt drive system into the 904 slicer would “turn Lindee’s timing belt on its head” and require further modification to the drive system. Reply 12–14. Petitioner contends Patent Owner’s arguments are based on a legally flawed bodily incorporation of the teachings of one reference into the other. Reply 12–14. Petitioner argues that a conveyor is not dependent on a specific orientation with respect to gravity; that Lindee’s conveyor belt system is used for the same purpose in Lindee as it is in the combination; and that the upper product guide of the 2006 904 Operating Manual is a multi-lane conveyor. *Id.* at 12–13.

⁶ <https://www.uspto.gov/TrialPracticeGuideConsolidated>.

Petitioner's argument appears to be based on *In re Keller*, which states

[t]he test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference, nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.

In re Keller, 642 F.2d 413, 426 (CCPA 1981).

We disagree that Patent Owner's arguments are based on bodily incorporation. Dr. Howard testifies that a person of ordinary skill in the art would not have combined the 2006 904 Operating Manuals and Lindee because of the lack of any advantage in doing so, as well as the difficulties that would be posed thereby. Ex. 2019 ¶ 99. But if one were to attempt such a combination, Dr. Howard recognizes that the 2006 904 Operating Manual's ball screws and Lindee's timing belts perform the same function of translating food grippers to drive food articles along their feed paths, so one could hypothetically combine the 2006 904 Operating Manual and Lindee by substituting the timing belts for the ball screws. Ex. 2019 ¶¶ 114–115, 120–121. Further, he perceives that the logical place to position the timing belt would be off to the side of the product conveyor according to the teachings of both the 2006 904 Operating Manual and Lindee. *Id.* He also recognizes that independently driving the food grippers requires multiple timing belts. *Id.* ¶ 122. Thus, Dr. Howard's testimony (and Patent Owner's corresponding arguments) does not merely take the specific mechanisms taught in the

references and seek to bodily incorporate them into one another without considering routine adaptations one of ordinary skill would have used to permit them to function together. Rather, Dr. Howard's view of the configuration resulting from combining the 2006 904 Operating Manual and Lindee (see above figure) is entirely consistent with the teachings of both references, which place the conveyor belts to the side of, and not "disposed over," the lift tray.

Petitioner also argues that the 2006 904 Operating Manual does not disclose that actuation system for moving the product holders, and that one of ordinary skill in the art would have sought out additional information, which would have been led one to Lindee's timing belt system. Reply 15. Contrary to Petitioner's assertion, however, the 2006 904 Operating Manual does disclose a ball screw drive system, as Dr. Howard explains with reference to the 2006 904 Parts Manual. Ex. 1005, 273–274. In this regard, we note that it is permissible for Dr. Howard to use the teachings of the 2006 904 Parts Manual to explain the teachings of the 2006 904 Operating Manual. *Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1372–73 (Fed. Cir. 2019) (one reference may be used to explain the teachings of another reference used in a petition challenge). Dr. Howard's expert testimony is entitled to more weight because it is consistent with the 2006 904 Operating Manual and 2006 904 Parts Manual considered as a whole, as opposed to Petitioner's argument which selectively considers the 2006 904 Operating Manual and 2006 904 Parts Manual and ignores or overlooks their teachings concerning ball screw drive systems. *Application of Wesslau*, 353 F.2d 238, 241 (CCPA 1965) ("It is impermissible within the framework of . . . 103 to pick and choose from any one reference only so much of it

as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.”).

Petitioner argues that even under Patent Owner’s “flawed construction,” the food article feed apparatus (product holder, upper product guide, and associated actuators in the 2006 904 Operating Manual (*see* Pet. 40)) is located above the food article loading apparatus (the product conveyor, timing belt, associated actuators and supporting structure in the 2006 904 Operating Manual (*see* Pet. 39)). Reply 17–19. Petitioner’s view is that the term “disposed over” merely means “higher than or above.” *Id.* at 16–17. We have already addressed that the proper construction of “disposed over” in limitation [1.2] means that the food article feed apparatus is “positioned above and in vertical and lateral alignment with” the food article loading apparatus and its lift tray assembly (*see* limitation [1.1]). *See* Section III.C. Petitioner’s argument is unpersuasive.

Petitioner further argues that the Petition explained that a person of ordinary skill in the art would have been motivated to locate Lindee’s belt drive system for the grippers in the upper portion of the 904 slicer because that is where the product holders (the grippers) and their support structure are located. Reply 18 (citing Pet. 46–47, 53). Petitioner contends it never suggested implementing belts that were not directly above the loading apparatus. *Id.* at 18–19.

From Figure 1 of the 2006 904 Operating Manual, *supra*, it is clear that the ball screw actuator (part of the feed apparatus) for the product holder (food article gripper) is not “positioned above and in vertical and

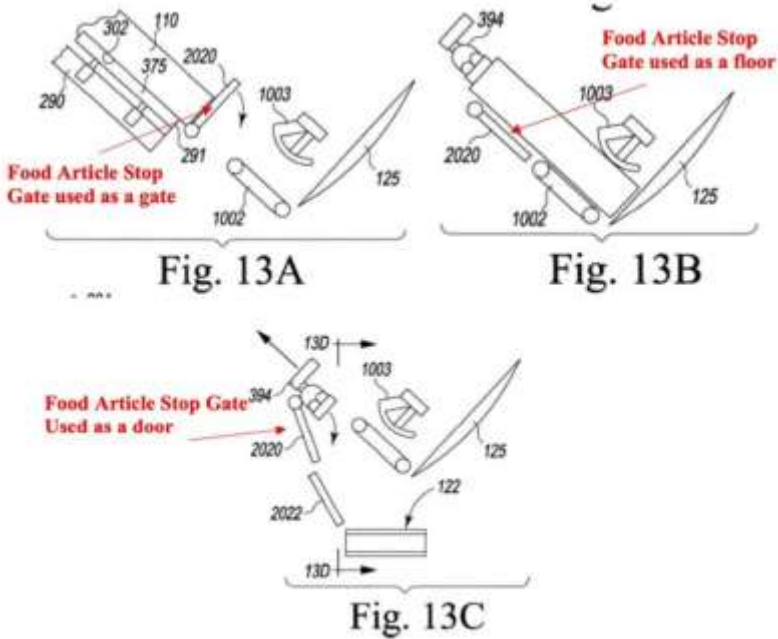
lateral alignment with” the product conveyor (part of the loading apparatus), but is instead laterally offset when the slicer is viewed from above. Replacing or substituting the ball screw actuator with Lindee’s timing belts would result in the timing belts being laterally offset from the product conveyor, as Dr. Howard explained in his schematic above. Again, both the 2006 904 Operating Manual and Lindee teach that the conveyor belts which drive the grippers are off to the side of the lift tray assembly.

To summarize, limitation [1.2] of claim 1 recites “a food article feed apparatus disposed over said food article loading apparatus.” Ex. 1001, 10:61–62. The combination proposed in the Petition results in the Lindee’s timing belt system replacing or substituting for the 2006 904 Operating Manuals’ ball screws, which are laterally offset from the 2006 904 Operating Manuals’ product conveyor. In this combination, Lindee’s conveyor belts (part of the food article feed apparatus according to the Petition) would not be “disposed over” (i.e., “positioned over and in vertical and lateral alignment with”) the 2006 904 Operating Manual’s product conveyor (part of the food article loading apparatus according to the Petition), as required by limitation [1.2] of claim 1. Consequently, the Petition does not show that limitation [1.2] of claim 1 would be satisfied by combining the 2006 904 Operating Manual and Lindee.

b) *“wherein the food articles are supported in position along the food article feed path by at least the food article stop gate when the lift tray assembly is moved when in its elevated position”*

Limitation [1.5] of claim 1 is reproduced in the above heading. Ex. 1001, 11:3–6. Petitioner contends that the 2006 904 Operating Manual discloses this limitation. Pet. 42.

This limitation corresponds to Figure 13B of the '436 Patent where food article stop gate 2020 acts as a floor supporting the food article in position along the feed path when the lift tray assembly has been lowered from its elevated position. Figure 13B is reproduced along with Figures 13A and 13C below, as annotated by Dr. Howard.



EX1001, FIG. 13A, 13B AND 13C (ANNOTATED)

Figures 13A, 13B and 13C, as annotated by Dr. Howard, show food article stop gate 2020 in gate, floor, and door configurations. Ex. 2019 ¶ 61; Ex. 1001, 9:58–63.

Ex. 2019 ¶ 61. In Figure 13B above, food article stop gate 2020 acts a floor supporting the food article in position as it is driven along its feed path to the slicer. *Id.*

Petitioner contends that the 2006 904 Operating Manual’s product bed conveyor (corresponding to the claimed “stop gate”) supports the food product by forming a floor, regardless of the position of the product conveyor (corresponding to the claimed “lift tray assembly”). Pet. 42 (citing Ex. 1005, 21, Fig. 10; Ex. 1003 ¶¶ 127–128).

Patent Owner contends that Petitioner does not allege that the 2006 904 Operating Manual teaches a stop gate that acts as a floor to support the food article when the lift tray assembly is moved *from* its elevated position. Resp. 52 (citing Ex. 2019 ¶¶ 135–137). Instead, Patent Owner contends that Petitioner only alleges that the stop gate supports the lift tray assembly when the lift tray assembly is moved *to* its elevated position. Resp. 52 (citing Pet. 42).

To support its contentions, Patent Owner relies on Figure 29 of the 2006 904 Operating Manual, shown below with Patent Owner’s annotations indicated in red. Sur-Reply 24.

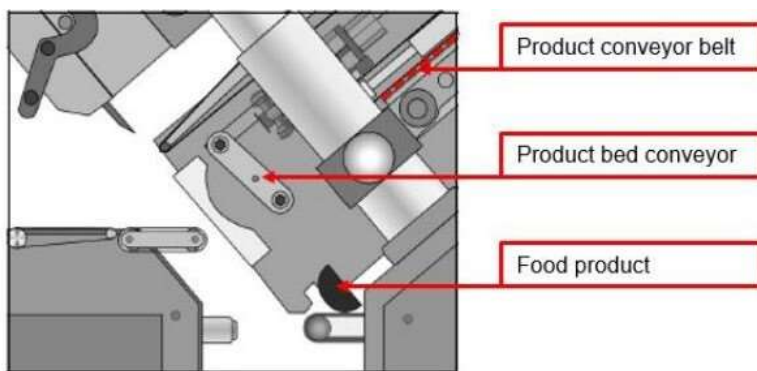


Fig. 29 Ejecting end pieces

(EX1005, Fig. 29 (annotated).)

Figure 5 of the 2006 904 Operating Manual shows the product conveyor belt and product bed conveyor during ejection of the end piece of the food product.

Ex. 1005, 40, Fig. 29.

In Figure 29 of the 2006 904 Operating Manual, the product bed conveyor (corresponding to the claimed stop gate) has moved to the door position to allow the

end piece to fall out of the machine for ejection. In this position, as shown in Figure 29, the product bed conveyor no longer supports the food product along the feed path. At the same time, Figure 29 shows that the product conveyor remains in its elevated position. As the product conveyor has not moved when in its elevated position when the product bed conveyor still supports the food product, the 2006 904 Operating Manual does not teach or suggest limitation [1.5] of claim 1 reciting “wherein the food articles are supported in position along the food article feed path by at least the food article stop gate when the lift tray assembly is moved when in its elevated position.”

Petitioner further argues that the 2006 904 Operating Manual discloses that the product bed conveyor supports a food article while the product conveyor lowers from its elevated position, allegedly disclosing limitation [1.5]. Reply 23–26 (citing Ex. 1005, Figs. 10, 28, 227; Ex. 1064, 37). However, the figures of the 2006 904 Operating Manual that Petitioner relies on either (1) do not show the food article in the slicer machine; or (2) do not show the product conveyor. Consequently, we find this evidence insufficient to show that the product bed conveyor of the 2006 904 Operating Manual supports the food article when the product conveyor moves from its elevated position.

Petitioner contends that it “may introduce new evidence after the petition stage . . . if it is used ‘to document the knowledge that skilled artisans would bring to bear in reading the prior art identified as producing obviousness.’” Reply 28 (citing *Anacor Pharms., Inc. v. Iancu*, 889 F.3d 1372, 1380–81 (Fed. Cir. 2018)). Petitioner contends that a 2008 promotional internet video for the 904 slicers shows

that these slicers were actually operated in accordance with Patent Owner’s claim construction. Reply 28–30 (citing Ex. 1051 ¶¶ 98–101, 104–107). Petitioner does not explain what construction of Patent Owner it is referring to. Nevertheless, Petitioner contends screen shots from the video show the product conveyor lowering as the product holders are advancing to the slicing station. *Id.* at 28–30 (citing Ex. 1068 at 1:07, 1:09, 1:11).

Patent Owner contends that the Exhibit 1068 video does not document the knowledge that skilled artisans would bring to bear in reading Petitioner’s prior art as producing obviousness. Sur-Reply 25. Patent Owner further contends that Petitioner does not make any assertion that a skilled artisan would have been aware of this video. *Id.* Patent Owner contends that this distinguishes this evidence from that relied on in *Anacor*, where an expert was already “familiar with” a published article before that article was introduced in the IPR. *Id.* at 26 (citing *Anacor*, 889 F.3d at 1381).

The Supreme Court has stated that *inter partes* review must proceed in conformance with the petition, and that the Director does not have license to depart from the petition and institute a different *inter partes* review of his own design. *SAS Institute v. Iancu*, 138 S.Ct. 1348, 1355–56 (2018). Petitioner essentially asks us to depart from the Petition by inserting new video evidence that is substantively different from certain parts of the 2006 904 Operating Manual that was relied upon in the Petition. Specifically, Figure 29 of the 2006 904 Operating Manual was relied upon in the Petition and shows the product conveyor is still elevated after slicing and during end piece ejection. *See* Pet. 6, 9, 40–41, 43, 66–67; Ex. 1005, 40, Fig. 29,

supra. Petitioner now contends that the video shows the product conveyor lowering as the product holder is advancing, and food articles are presumably supported by the product bed conveyor. Reply 28–30. We decline, in effect, to revise the Petition with this video evidence.

Accordingly, the Petition does not show by a preponderance of the evidence that claim 1 of the '436 Patent is obvious under 35 U.S.C. § 103 over the combination of the 2006 904 Operating Manual and Lindee.

2. *Claims 2–16*

Claims 2–8 depend from claim 1. For the reasons stated above with respect to claim 1, the Petition does not show that claims 2–8 are unpatentable as obvious over the 2006 904 Operating Manual and Lindee.

Independent claim 9 differs from claim 1 by reciting independently driven and controlled endless conveyor belts. Ex. 1001, 11:39–41, 12:1–4. For limitations [9.3] and [9.7] of claim 9, the Petition refers back to the analyses for corresponding elements [1.2] and [1.5] of claim 1. Pet. 77, 79. For the reasons stated with respect to claim 1, we find that limitations [9.3] and [9.7] are not unpatentable as obvious over the combination of the 2006 904 Operating Manual and Lindee.

Claims 10–16 depend from claim 9. For the reasons stated above with respect to claim 9, claims 10–16 have not been shown unpatentable over the combination of the 2006 904 Operating Manual and Lindee.

C. *Ground 2: Obviousness of Claims 1–16
Based on the 2010 904 Operating Manual and
Lindee*

Petitioner asserts that the “2010 904 Operating Manual is substantively identical to the 2006 904 Operating Manual” except that it adds detail related to the upper product guide that has separate conveyors and drives to permit the conveyors to be independently driven at different speeds. *See* Pet. 71, 77 (citing Ex. 1009, 166). Consequently, Petitioner’s reliance on the 2010 904 Operating Manual in this ground is substantively the same as Petitioner’s use of the 2006 904 Operating Manual discussed in the first ground discussed in Section V.B, except with respect to motivation to combine. *See, e.g., id.* at 72–74, 76–79 (referring back to ground based on the 2006 904 Operating Manual to explain how the 2010 904 Operating Manual discloses the limitations of claim 1). As to motivation to combine, Petitioner argues that the individual product guide conveyors of the 2010 904 Operating Manual provide additional motivation to incorporate Lindee’s independent gripper conveyor drives. *Id.* at 74–75 (citing Ex. 1006, 9:18–22; Ex. 1003 ¶ 247). We find that the combination of the 2010 904 Operating Manual and Lindee fails to disclose the limitations [1.2] and [1.5] of claim 1 and limitations [9.3] and [9.7] of claim 9 for the same reasons described above in connection with our analysis of the combination of the 2006 904 Operating Manual and Lindee. *See* Section V.B. *supra*.

Accordingly, the Petition does not establish by a preponderance of the evidence that claims 1–16 are unpatentable as obvious over the combination of the 2010 904 Operating Manual and Lindee.

VI. MOTION TO EXCLUDE

Pursuant to 37 C.F.R. §§ 42.62 and 42.64, Patent Owner moves to exclude Exhibit 1051 ¶¶ 61, 95–107; Exhibit 1060 ¶ 36; and Exhibit 1068. Paper 59, 2. Patent Owner contends “Petitioner’s Reply added a new obviousness theory, introduced new evidence to allegedly teach limitations missing from the Petition, and introduced evidence that contravenes the IPR printed publications requirement.” *Id.* Petitioner filed an Opposition to the Motion to Exclude (Paper 60), and Patent Owner filed a Reply to Petitioner’s Opposition (Paper 63).

For the most part, we agree with Patent Owner that Exhibit 1051 ¶¶ 61, 95–107; Exhibit 1060 ¶ 36; and Exhibit 1068 are new evidence submitted for the first time with the Reply. Reply 12, 14, 18, 24–30. This evidence relates to Petitioner’s proposed modification to extend the upper product guide in the 2006 and 2010 904 Operating Manuals (Ex. 1051 ¶ 61) discussed in Section V.B.1.a, *supra*; additional explanation for why the product bed conveyor of the 2006 and 2010 904 Operating Manuals supports a food article when the product conveyor moves in its elevated position (Ex. 1051 ¶¶ 98–102) discussed in section V.B.1.b, *supra*; and Petitioner’s video evidence (Ex. 1051 ¶¶ 104–107; Ex. 1060 ¶ 36; Ex. 1068) discussed in Section V.B.1.b, *supra*. This evidence is proffered to make out or “gap-fill” a prima facie case of unpatentability, and it appears that it could have been submitted with the Petition. At least, Petitioner does not explain why it was not. Accordingly, we do not consider this new evidence in arriving at this decision. *See* TPG, 73–75.

Consequently, as we did not rely on any of the evidence that is the subject of Patent Owner’s motion to exclude in arriving at our decision, we dismiss the motion to exclude as moot.

VII. CONCLUSION

We find that the Petition does not establish by a preponderance of the evidence that the 2006 904 Operating Manual or the 2010 904 Operating Manual constitute “printed publications” under 35 U.S.C. § 311(b). The Petition further does not show by a preponderance of the evidence that the challenged claims of the ’436 Patent are unpatentable as obvious because at least limitations [1.2] and [1.5] of claim 1 and limitations [9.3] and [9.7] of claim 9 of the ’436 Patent are not taught or suggested by the prior art references.

In summary,

| Claims | 35 U.S.C. § | Refer- ence(s) | Claims Shown Unpatent- able | Claims Not Shown Unpatent- able |
|------------------------|--------------------|--|--|--|
| 1-16 | 103 | 2006 904 Operating Manual, Lindee | | 1-16 |
| 1-16 | 103 | 2010 904 Operating Manual, Lindee | | 1-16 |
| Overall Outcome | | | | 1-16 |

VIII. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 1–16 of the '436 Patent have not been shown to be unpatentable;

FURTHER ORDERED that Patent Owner's motion to exclude is *dismissed* as moot;

FURTHER ORDERED that the parties shall jointly submit a proposed redacted version of the Final Written Decision (Paper 66) as a confidential Exhibit within 14 days of this Decision. In the absence of such a proposal, at the expiration of 14 days from the date of this Decision, the entirety of the Final Written Decision will be made available to the public.

FURTHER ORDERED that any party seeking judicial review must comply with the notice and service requirements of 37 C.F.R. § 90.2.⁷

⁷ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this Decision, we draw Patent Owner's attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. See 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. See 37 C.F.R. § 42.8(a)(3), (b)(2).

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UNITED STATES PATENT AND
TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND
APPEAL BOARD

WEBER, INC.,
Petitioner,

v.

PROVISUR TECHNOLOGIES, INC.,
Patent Owner.

IPR2020-01557
Patent 10,639,812 B2

Before MITCHELL G. WEATHERLY, FRANCES L.
IPPOLITO, and JON M. JURGOVAN, *Administrative
Patent Judges.*

JURGOVAN, *Administrative Patent Judge.*

JUDGMENT
Final Written Decision
Determining No Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

A. *Background*

Weber, Inc. (“Petitioner”) filed a Petition (Paper 3, “Pet.”) requesting *inter partes* review of claims 1–11 of U.S. Patent No. 10,639,812 B2 (Ex. 1001, the “812 Patent”). Provisur Technologies, Inc. (“Patent Owner”) filed a Preliminary Response. Paper 8 (“Prelim. Resp.”). Applying the standard set forth in 35 U.S.C. § 314(a), we instituted review of claims 1–11 of the ’812 Patent.

During trial, Patent Owner filed a Response (Paper 24, “Resp.”), Petitioner filed a Reply (Paper 29), and Patent Owner filed a Sur-Reply (Paper 48).¹ Patent Owner also filed a Motion to Exclude (Paper 58), Petitioner filed an Opposition to the Motion to Exclude (Paper 59), and Patent Owner filed a Reply to Petitioner’s Opposition (Paper 62).

An Oral Hearing took place on December 16, 2021. The Hearing Transcript is included in the record. Paper 63 (“Tr.”).

After considering the parties’ arguments and supporting evidence, we determine that Petitioner has not proved by a preponderance of the evidence that claims 1–11 are unpatentable. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d) (2020).

¹ Patent Owner also submitted redacted versions of its Preliminary Response, Response, and Sur-Reply. Papers 7, 24, 48. The redactions relate to information subject to our Protective Orders. Papers 13, 57.

B. Real Parties in Interest

Petitioner identifies the following entities as real parties in interest: Textor, Inc.; Weber Maschinenbau GmbH Breidenbach; Weber Maschinenbau GmbH Neubrandenburg; and Textor Maschinenbau GmbH. Pet. 86. Patent Owner identifies Provisur Technologies, Inc. as the sole real party in interest. Paper 5, 1.

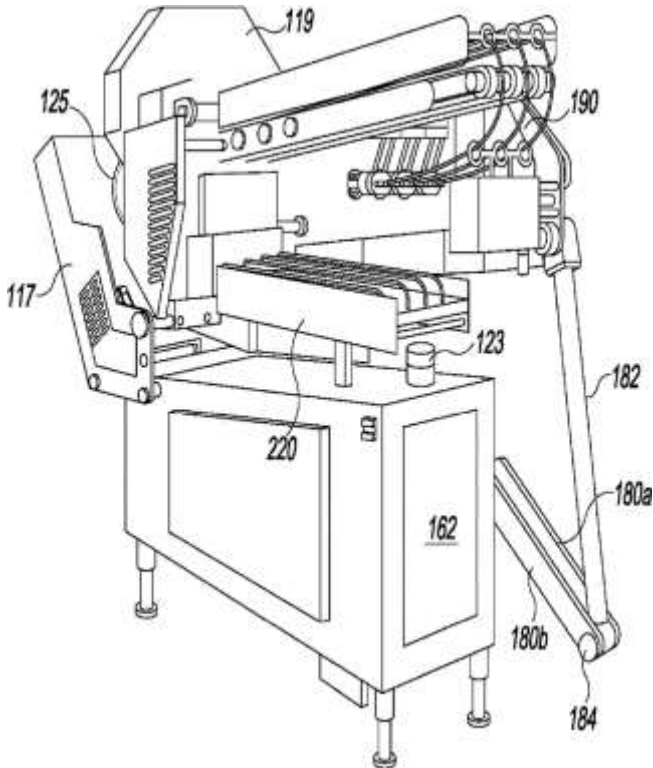
C. Related Matters

The parties list as related matters *Provisur Technologies, Inc. v. Weber, Inc. et al*, Case No. 5-20-cv-06069 (MOWD); and IPR2020-01556, which challenges U.S. Patent No. 10,625,436 B2, and which, like the '812 Patent, is a divisional of U.S. Application No. 13/099,325 filed May 2, 2011. Paper 5, 1; Pet. 86.

D. The '812 Patent

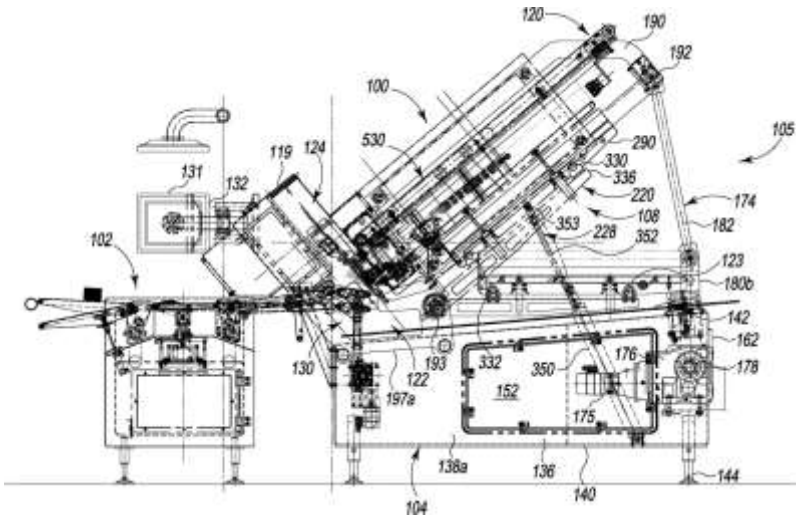
The '812 Patent is titled "High Speed Slicing Machine." Ex. 1001, code (54). The slicing machine has a slicing station; a moveable frame supporting a food article feed mechanism frame; and a food article gate. Ex. 1001, code (57). Food articles are loaded onto a lift tray at a staging position which raises to an elevated position where food articles contact the food article gate in line with the feed paths of the food articles. *Id.* Food article grippers, driven individually along the feed paths, move food articles toward the slicing station. *Id.* The food article gate assists in removal of end portions of food articles. *Id.*

Figure 1B of the '812 Patent is shown below.



The '812 Patent's Figure 1B shows lift tray assembly 220 in a staging position for loading food articles.

Figure 1B depicts slicing machine 100. *Id.* at 3:31–32. Lift tray assembly 220 is in a staging position to allow food articles to be loaded therein in multiple lanes. *Id.* at 9:28–35. Lift tray assembly 220 then elevates from the staging position to an elevated position that aligns food products with feed paths to a slicing blade of slicing head apparatus 124, as shown below in Figure 1, which is reproduced below. *Id.* at 9:60–10:5.



The '812 Patent's Figure 1 illustrates a side view of slicing apparatus 100 with lift tray assembly 220 in its elevated position to feed food articles into a slicing blade.

Figure 1, above, shows that slicing apparatus 100 includes base section 104 with collapsible frame 105, and an automatic food article loading apparatus 108 that receives food articles 110 to be sliced. *Id.* at 4:33–50. Slicing apparatus 100 further includes food article feed apparatus 120, food article end and scrap removal conveyor 122, slicing head apparatus 124, and slice receiving conveyor 130. *Id.*

Figures 13A to 13D of the '812 Patent are shown below.

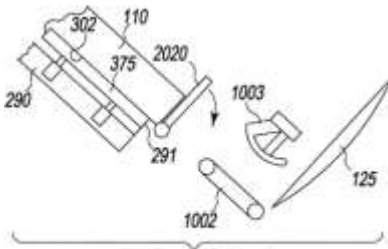


Fig. 13A

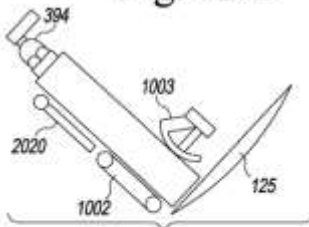


Fig. 13B

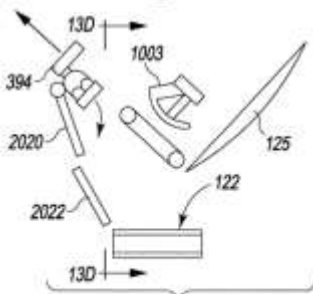


Fig. 13C

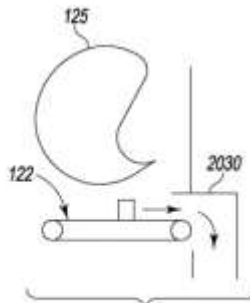


Fig. 13D

Figures 13A to 13D of the '812 Patent depict stages of operation of the '812 Patent's loaf feed apparatus.

Id. at 4:7–15.

In Figure 13A, the lift tray assembly 220 is elevated into position. Food article gate 2020 blocks food article 110 initially from advancing to the slicing station. *Id.* at 10:8–9. In Figure 13B, article gate 2020 lowers and acts as a floor for food article 110 while gripper 394

grips the food product and is driven by a drive belt to feed it into the slicing blade. *Id.* at 10:9–10. In Figure 13C, article gate 2020 further lowers and gripper 394 releases the remainder end of food article 110 so that it drops past article gate 2020 onto baffle 2022 to scrap removal conveyor 122. *Id.* at 10:10–15. In Figure 13D, conveyor 122 conveys the remainder end of the food article to discharge chute 2030. *Id.* at 10:16–20.

E. Illustrative Claim

Petitioner challenges claims 1–11, which are all of the claims in the '812 Patent. Claim 1 is independent and claims 2–11 depend, directly or indirectly, from claim 1. Claim 1 is reproduced below, with brackets noting Petitioner's identifiers:

- [1.p] 1. A food article slicing machine comprising:
 - [1.1] a) a slicing station comprising a knife blade and a knife blade drive driving the blade along a cutting path in a cutting plane;
 - [1.2] b) a food article loading apparatus;
 - [1.3] c) a food article feed apparatus disposed over said food article loading apparatus,
 - [1.4] d) said food article feed apparatus having a conveyor assembly with independently driven endless conveyor belts,
 - [1.5] e) wherein each of the conveyor belts is connected to a food article gripper for moving a food article along a food article feed path,
 - [1.6] f) the conveyor assembly is an upper conveyor assembly,
 - [1.7] g) a food article stop gate disposed upstream of the slicing station forms a portion of the food article feed path,
 - [1.8] h) wherein the food article loading apparatus includes a lift tray assembly moveable between a

staging position and an elevated position, said elevated position being a position wherein the food articles disposed within the lift tray assembly are in the food article feed path,

[1.9] i) the food articles are supported in position along the food article feed path by at least the food article stop gate when the lift tray assembly is moved from its elevated position,

[1.10] j) wherein the food article stop gate also serves as a door for the removal of food article end portions.

Ex. 1001, 11:12–38 (bracketed labels added in correspondence with Petitioner’s identification of the claim elements for ease of discussion).

F. Asserted Grounds

Petitioner contends that the challenged claims would have been unpatentable based on the following grounds:

| Claims Challenged | 35 U.S.C. §² | References/Basis |
|--------------------------|--------------------------------|--|
| 1–5, 8–11 | 103 | 2006 904 Operating Manual, ³ Lindee, ⁴ Sandberg ⁵ |
| 6, 7 | 103 | 2006 904 Operating Manual, Lindee, Sandberg, Mathues ⁶ |
| 1–5, 8–11 | 103 | 2010 904 Operating Manual, ⁷ Lindee, Sandberg |
| 6, 7 | 103 | 2010 904 Operating Manual, Lindee, Sandberg, Mathues |

² The Leahy-Smith America Invents Act, Pub. L. No. 112–29, 125 Stat. 284 (2011) (“AIA”), included revisions to 35 U.S.C. §§ 102 and 103 that became effective after the effective filing date of the challenged claims. Therefore, we apply the pre-AIA version of 35 U.S.C. §§ 102 and 103.

³ *Operating Manual: Slicer CCS 904* (English Language Translation), CCS- 904_06_2006-07-01_GB / T-07_2005-11-10, by Weber Group, 1–288 (Ex. 1005) asserted as prior art under pre-AIA § 102(b). Pet. 28–29.

⁴ US 5,628,237, issued May 13, 1997 (Ex. 1006) asserted as prior art under pre-AIA § 102(b). Pet. 29.

⁵ US 2009/0145272 A1, filed October 21, 2008 (Ex.1012) asserted as prior art under pre-AIA § 102(a) and § 102(e). Pet. 29.

⁶ US 2008/0016999 A1, published January 24, 2008 (Ex. 1013) asserted as prior art under pre-AIA § 102(b). Pet. 29.

⁷ *Operating Manual for the Slicer CCS 904-02 (for product lengths to 1200 mm / 1600 mm)* (English Language Translation), by Weber Group, 1–259 (Ex. 1009) asserted as prior art under pre-AIA § 102(a). Pet. 29.

Pet. 30. In support of its proposed grounds, Petitioner relies on the Declaration of Richard Hooper, Ph.D. *See* Ex. 1003; Pet. 2.

II. LEVEL OF ORDINARY SKILL IN THE ART

Petitioner proposes that a person of ordinary skill in the art would have had “(1) a bachelor’s degree (or equivalent) in mechanical engineering (or a similar field) and at least two years of experience working on food processing and/or packaging systems (or in a similar field)” or “(2) at least seven years of experience working on food processing and/or packaging systems (or in a similar field).” Pet. 20 (citing Ex. 1003 ¶¶ 26–27). Patent Owner does not contest Petitioner’s definition or provide its own proposal. For purposes of this Decision, we adopt Petitioner’s proposal because Petitioner’s proposed definition is consistent with the level of skill demonstrated in the cited prior art references. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

III. CLAIM CONSTRUCTION

“In an *inter partes* review proceeding, a claim of a patent . . . shall be construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b).” 37 C.F.R. § 42.100(b) (2019). That standard “includ[es] construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” *Id.*; *see also Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). Only terms that are in controversy need to be construed, and then only to the extent necessary to resolve the controversy. *Nidec Motor Corp. v.*

Zhongshan Broad Ocean Motor Co., 868 F.3d 1013, 1017 (Fed. Cir. 2017).

We find that only one phrase is in dispute, namely, “a food article feed apparatus *disposed over* said food article loading apparatus.” Pet. 39–41, 79–80; Resp. 46–50; Reply 15–19; Sur-Reply 16–18 (emphasis added).

A. Petitioner’s Contentions

Petitioner contends that the term “disposed over” does not require vertical alignment of the feed apparatus to the loading apparatus, and even if it does, the 904 Operating Manuals show the food article feed apparatus (the product holder, upper product guide, and related structure and actuators) located above the food article loading apparatus. Reply 15–19 (citing Ex. 1005, Fig. 5).

Petitioner supports its position with the prosecution history of the ’812 Patent, where the Examiner stated that the term “over” is broad and means “above” (not directly above), citing a dictionary definition from Merriam- Webster. Reply 17 (citing Ex. 1066, 208–209).

B. Patent Owner’s Contentions

Patent Owner argues that, in Petitioner’s combinations (*see* Section 1.F), the conveyor belts, which are components of the feed apparatus, are offset to the side of, and not disposed over, the load apparatus. Resp. 46–50. Since limitation [1.3] of claim 1 of the ’812 Patent requires the feed apparatus to be “disposed over” the loading apparatus, Patent Owner argues Petitioner’s combinations fail to teach or suggest this limitation. *Id.* Patent Owner also

contends Petitioner’s combinations would result in conveyor belts that are out of the feed paths. *Id.*

Patent Owner contends that Petitioner’s claim construction that “disposed over” means merely “above” is incorrect. Sur-Reply 16. Patent Owner notes that the specification of the ’812 Patent shows the upper conveyor assembly, a component of the feed apparatus (*see* Ex. 1001, 5:58–59), higher than and vertically in-line with the loading apparatus. *Id.* (citing Ex. 1001, Fig. 1B). Patent Owner contends that the specification distinguished prior machines with a feed apparatus (a “loaf sweep mechanism”) located above but horizontally offset from the loading apparatus. *Id.* at 17 (citing Ex. 1001, 1:62–2:20). According to Patent Owner, the substantially vertically aligned stack of components envisioned by the inventors of the ’812 Patent allowed for “operational enhancements” by reducing the footprint of the machine and increasing hygiene by creating a more open configuration that can be easily cleaned. *Id.* at 17 (citing Ex. 1001, 2:37–40; Ex. 2019 ¶¶ 69–71).

Patent Owner acknowledges that the Examiner interpreted “disposed over” broadly as “above” during prosecution of the ’812 Patent, but notes that the Examiner used the “broadest reasonable interpretation” standard, which is a different standard than used by the Board in *inter partes* reviews, leading to a different interpretation. Sur-Reply 17–18 (citing MPEP § 2111; Ex. 1066, 208–209).

Patent Owner further states that multiple courts have rejected the broad construction of “over” to mean “above” as Petitioner proposes. Sur-Reply 18 (citing *Home Semiconductor Corp. v. Samsung Elecs. Co., Ltd.*, 701 F. App’x 1006, 1009–14 (Fed. Cir. 2017) (a

layer “only ‘above’” and “merely insignificantly overlapping” a second region, was not “over” that “region.”); *Orion Energy Sys. Inc. v. Energy Bank, Inc.*, 2017 WL 4773301, *11–*12 (E.D. Wis. 2017) (“above” denotes direction, not positional, alignment “. . . ‘provided substantially over’ is understood to mean ‘disposed in an overlaying relationship.’”).

C. *Analysis*

From the foregoing, it is clear that the parties dispute the meaning of “disposed over” and we must construe the term. *See Nidec Motor, supra*.

“[T]he specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’” *Phillips*, 415 F.3d at 1315.

Limitation [1.3] of claim 1 recites “a food article feed apparatus *disposed over* said food article loading apparatus.” To understand what is meant by “disposed over,” we examine how the specification describes the food article loading apparatus 108 and the food article feed apparatus 120 and their relationship to one another.

The specification of the ’812 Patent describes the food article loading apparatus 108 to include a lift tray assembly 220 that moves between a staging position for loading food articles, and an elevated position bringing the food articles “in line” with respective feed paths to the slicing blade 125. Ex. 1001 at 2:52–54; 4:43–46; 9:28–10:5, Figs. 1, 1B, 8. The lift tray assembly 220 has three lanes corresponding to three feed paths, which are defined by four spaced-apart guard rails 303, although the lift tray assembly can be configured for “any number of paths.” *Id.* at 9:13–15, 9:42–45, Figs. 1B, 8. In the staging position, food

articles are loaded into the three lanes of the lift tray assembly 220. *Id.* at 9:41–42. Lift tray positioning apparatus 228 then pivots the lift tray assembly 220 to the elevated position. *Id.* at 9:28–34, 9:60–66. In the elevated position, the lift tray 302 aligns the food articles in their feed paths to the slicing blade 125 so that no lateral shifting of food articles is required to position them. *Id.* at code (57), 2:52–55.

The '812 Patent describes the food article feed apparatus 120 as including an overhead conveyor assembly 530 with conveyor belts 802, 804, 806 and grippers 894 on their lower runs to engage with the ends of food articles to drive them along their feed paths toward the slicer. *Id.* at 2:55–57, 6:31–34, 7:10–17, 9:10–25, Figs. 2, 7, 7A, 7B, 7C. Since the range of movement of the grippers 894 define the feed paths of the food articles, the conveyor belts 802, 804, 806 that drive them are necessarily aligned to the feed paths. *Id.* at 6:31–34, 9:10–25.

Moreover, in either the staging position or the elevated position, the lift tray assembly 220 is *vertically and laterally* aligned with the food article feed apparatus 120 and its overhead conveyor assembly 520 with conveyor belts 802, 804, 806 and grippers 894. *Id.* at Figs. 1, 1B, 8. Vertically aligned means that the feed apparatus 120 is directly above the loading apparatus 108. Laterally aligned means that, when the feed apparatus 120 and loading apparatus 108 are viewed from above, there is no offset between the sides of feed apparatus and the loading apparatus.

From the foregoing, it is clear that the specification of the '812 Patent describes only one configuration for the loading apparatus 108 and the feed apparatus 120. That configuration positions the feed apparatus

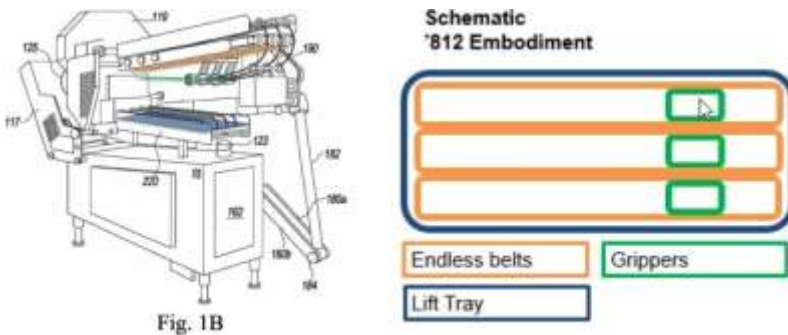
over the loading apparatus in vertical and lateral alignment therewith, such that no lateral shifting of food articles is required to load and feed them from the loading apparatus into the feeding apparatus. Lateral shifting refers to loading food articles from the side of the feed apparatus, rather than from below as described in the '812 Patent, and is described in the background section of the '812 Patent. Ex. 1001, 1:63–65. In the '812 Patent, the feed apparatus is “disposed over” the loading apparatus, which pivots between the staging position to load food articles, and the elevated position where the food articles are aligned to the feed paths below the feed apparatus and its conveyors and grippers which engage and drive the food articles into the slicer. *Id.* at 2:52–55.

Although the Examiner interpreted “disposed over” as meaning “above” (Ex. 1066, 208–209), Patent Owner is correct that the standard in prosecution is different from that applied in this *inter partes* review. Sur-Reply 17. The standard in prosecution is broadest reasonable interpretation. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1369 (Fed. Cir. 2004). In contrast, as noted, the standard here is the same as would be used in a civil action under 35 U.S.C. § 282(b). 37 C.F.R. § 42.100(b). This is often referred to as the *Phillips* standard after the Federal Circuit case that first introduced it.

Under the *Phillips* standard, claim terms must be construed in light of the specification in which they appear. *Phillips*, 415 F.3d at 1315. We find that interpreting “disposed over” as merely “above” without also requiring vertical and lateral alignment, as Petitioner proposes (Reply 16), is too broad in light of how the specification presents the relationship between the feed apparatus and loading apparatus in

the '812 Patent. One of ordinary skill in the art would understand that, if the feed apparatus were vertically above but laterally offset from the load apparatus in the '812 Patent, the conveyor belts and grippers of the feed apparatus would not be aligned with the feed paths and they would not contact the ends of the food articles to drive them toward the slicing station, as the '812 Patent teaches. *See* Ex. 1001 at code (57), 2:55–57, Fig. 1B.

Patent Owner's expert, Dr. William S. Howard, provides the annotated illustration of the '812 Patent's Figure 1B and a demonstrative schematic of Figure 1B, shown below. Ex. 2019 ¶ 70.



EX1001, FIG. 1B (ANNOTATED)

DEMONSTRATIVE SCHEMATIC

Dr. Howard's annotated Figure 1B of the '812 Patent and demonstrative schematic are illustrated above and show the positional relationship between grippers 894 and endless belts 802, 804, 806 of feed apparatus 120, and lift tray assembly 220 of loading apparatus 108. Ex. 2019 ¶ 70.

In the annotated Figure 1B and the demonstrative schematic view of the slicer machine above, the food article loading apparatus 108 including lift tray assembly 220 (annotated blue) is directly under the plane defined by the grippers 894 (annotated green).

Id. The endless belts 802, 804, 806 of the feed apparatus 120 (annotated orange) are directly above the plane of the grippers 894. *Id.* Dr. Howard testifies that the feed apparatus 120 is disposed over the loading apparatus 108. *Id.* He further testifies that this arrangement would allow more independent feed paths to be added to the machine, and that overall footprint of the machine would be reduced, which is advantageous in the food processing facilities, which tend to have limited floor space. *Id.*

Petitioner's expert, Dr. Richard Hooper, agrees with Petitioner's proposed construction of "disposed over" as meaning "above." Ex. 1051 ¶¶ 69–75. Dr. Hooper testifies that claim 1 of the '812 Patent recites "said food article feed apparatus *having* a conveyor assembly with independently driven endless conveyor belts." He testifies that a person of ordinary skill in the art would understand the word "having" to mean that the feed apparatus would include more elements such as motors and grippers, which allegedly are not "disposed over" the loading apparatus. *Id.* ¶ 73 (citing Ex. 1001, Fig. 2 [elements 850]). However, claim 1 of the '812 Patent does not recite that the food article feed apparatus has motors, nor does Dr. Hooper show that the grippers as part of the feed apparatus are not "disposed over" the loading apparatus. Consequently, Dr. Hooper's statements are not supported by underlying facts or data, and they are entitled to little or no weight. *See* 37 C.F.R. § 42.65.

Dr. Hooper testifies that Figure 2 of the '812 Patent shows servomotors and shafts that are not vertically above the loading apparatus. *Id.* ¶ 73. It is not the servomotors and shafts, however, that need to be aligned with the feed paths. Instead, the load apparatus's lift tray assembly 220 which supports the

food articles along their feed paths, and the feed apparatus's conveyor belts 802, 804, 806 that drive the grippers 894 to move the food articles along their feed paths, are what need to be aligned. Dr. Hooper's testimony is unpersuasive.

Dictionaries can be useful in claim construction. *See Phillips*, 415 F.3d at 1318. One dictionary defines "over" as "[i]f one thing is **over** another thing or is moving **over** it, the first thing is directly above the second, either resting on it, or with a space between them." Collins Dictionary, <https://www.collinsdictionary.com/us/dictionary/english/over> (last viewed 1-18-22) (emphasis original). Exhibit 3003. This definition is closer to expressing the arrangement of the apparatuses described in the '812 Patent compared to the definition used by the examiner. Ex. 1002; Ex. 1066, 208–209. The feed apparatus 120 is directly above the loading apparatus 108, with a space between them. Hence, our construction is consistent with this dictionary definition, which we find more representative of the plain and ordinary meaning appropriate to the arrangement described in the '812 Patent than is the definition provided by the Examiner considering the claims under the broadest reasonable interpretation standard.

In construing various terms in the '812 Patent, the District Court substituted "positioned over" for "disposed over" in its claim construction order "given its usage throughout the Patents-at-Issue and to provide clarity for the jury." Ex. 1063, 13. Thus, the District Court's interpretation did not stem from any dispute between the parties, but instead was for the purpose of ensuring that a jury would understand the claim language. In contrast, in this proceeding, the

parties dispute the meaning of “disposed over.” We find it necessary to further refine the District Court’s construction to resolve the controversy presented in this proceeding. *See Nidec Motor, supra*. We consider our construction to be entirely consistent with the District Court’s because “positioned over” does not mean merely “above” as Petitioner contends, but connotes that one thing is directly over another thing and are thus aligned with one another.

Hence, in light of the foregoing, we find that the proper construction of “disposed over” means that the food article feed apparatus and its conveyor belts and grippers are “positioned above and in vertical and lateral alignment with” the food article loading apparatus and its lift tray assembly.

For the avoidance of doubt, we reproduce Dr. Howard’s annotated Figure 1B and schematic below with additional red arrows that we include to show vertical alignment and lateral alignment of the food article feed apparatus 120 and the food article loading apparatus 108.

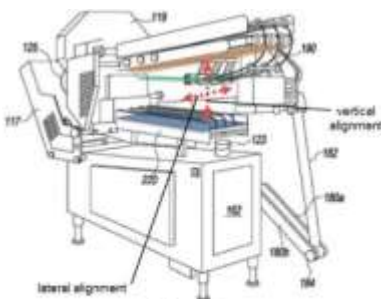
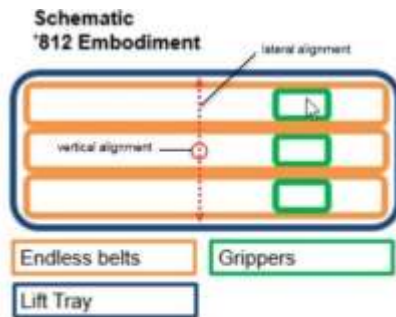


Fig. 1B

EX1001, FIG. 1B (ANNOTATED)



DEMONSTRATIVE SCHEMATIC

Dr. Howard's annotated Figure 1B and schematic with additional annotations we add to show vertical alignment and lateral alignment of the food article feed apparatus and food article loading apparatus.

In Dr. Howard's annotated Figure 1B and schematic, shown above, we indicate in red arrows what is meant by vertical alignment and lateral alignment of the food article loading apparatus 108 and the food article feed apparatus 220. The red circle in the demonstrative indicates the alignment arrow extends in the direction into the page with one end point touching the endless belts and the other end point touching the lift tray's surface. Such alignments are required for the lift tray assembly to be able to pivot from the staging position to the elevated position where the lanes defined by the lift tray assembly, and therefore food articles, are aligned with the feed paths so that the grippers, driven by the endless conveyor belts, can engage with and drive the food articles along their feed paths toward the slicer.

IV. CITED PRIOR ART REFERENCES

A. *2006 904 Operating Manual*

The 2006 904 Operating Manual describes operations of a food slicer, Petitioner's CCS 904 food slicer. Ex. 1005, 3-9. Figure 6 is reproduced below:

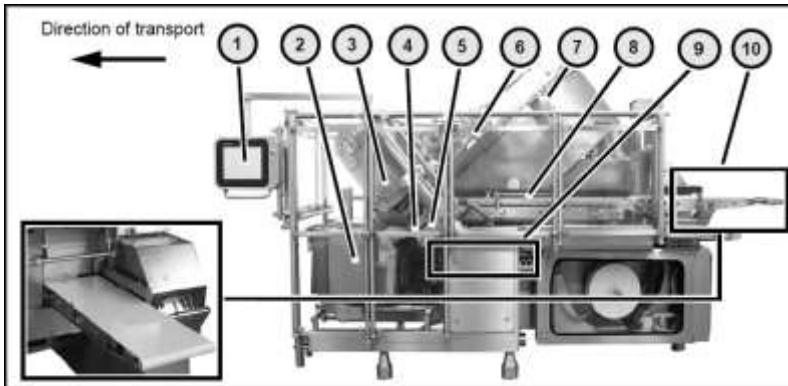


Fig. 6 Machine overview (for product lengths up to 1200 mm)

Figure 6 illustrates a slicing machine for slicing products up to 1200 mm. *Id.* at 15.

In the slicer illustrated in Figure 6, element 3 refers to a blade head housing, which contains a blade head drive, a blade head, and an involute blade. *Id.* at 15–16. Element 4 refers to a shear bar and product-section guide where the products are sliced. *Id.* Element 5 is a product bed conveyor that supports the guidance and transport of the product up to the shear bar, and serves as a product limit stop when the slicer is loaded and as a last piece ejection flap when the product's end pieces are ejected from the product holder. *Id.* Element 6 is an upper product guide for pressing on the products from above to facilitate even transport into the slicing area. *Id.* Element 7 refers to product holders for gripping the products, feeding them into the outlet and preventing them from falling out during slicing. *Id.* Element 8 is a product conveyor for feeding the products into the slicing area. *Id.* Element 9 is an end piece removal conveyor for moving end pieces of the products out of the slicing area. *Id.* Finally, element 10 is a timing belt used by the operator or by a module connected upstream to feed products to the slicer. *Id.*

Figure 7 is reproduced below:

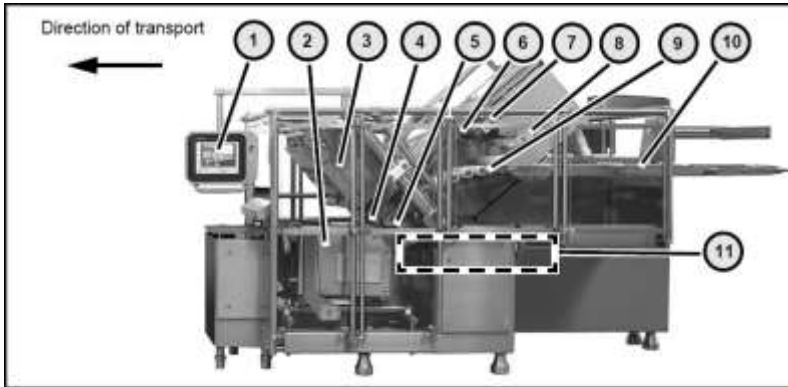


Fig. 7 Machine overview (for product lengths exceeding 1200 mm)

Figure 7 illustrates a slicing machine for slicing products exceeding 1200 mm in length. *Id.* at 17.

The slicer illustrated in Figure 7 includes elements 1–7, which are similar to elements 1–7 of the slicer illustrated in Figure 6. In addition, the slicer of Figure 7 includes a blank holder (element 8) that presses the product on to the transport tracks and thus supports an even and safe guidance of the product. *Id.* at 17–18. Element 9 is an end piece ejection flap for guiding the product into the slicing area and enabling the end piece to be ejected. *Id.* Element 10 is a product conveyor for feeding products into the slicing area. *Id.* Element 11 is an optional end piece removal conveyor for moving out of the slicing area the first slices or the end pieces of the products. *Id.*

Figures 28 and 29 of the 2006 904 Operating Manual, reproduced below, illustrate a slicing process and a process of ejecting end pieces. *Id.* at 40.

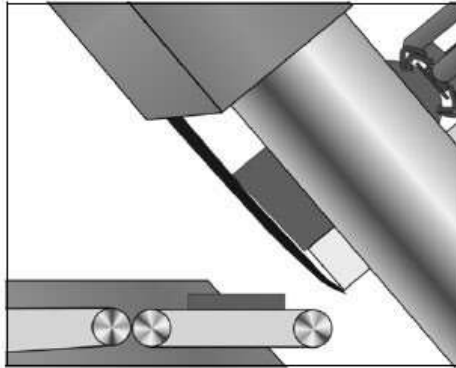


Fig. 28 Slicing process

Figure 28 illustrates a slicing process for products fed to the blade. *Id.*

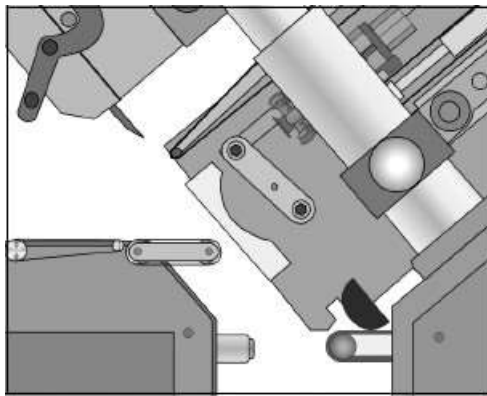


Fig. 29 Ejecting end pieces

Figure 29 illustrates ejection of end product pieces. *Id.*

The ejection process illustrated in Figure 29 (i) pulls back the end pieces of the products using the product holder, (ii) pivots the product bed conveyor into the ejection position, and (iii) uses the product holder to let the end pieces fall such that (iv) the end pieces fall on to the end piece removal conveyor and are removed. *Id.*

B. 2010 904 Operating Manual

The 2010 904 Operating Manual describes the operations of Petitioner's CCS 904-02 food slicer. Ex. 1009, 1, 3–8. According to Petitioner, the 2010 904 Operating Manual is “substantively identical” to the 2006 904 Operating Manual except that it describes “an additional, optional feature that enables each of the upper conveyors (i.e., the ‘product guide’) to be independently driven by separate drive motors.” Pet. 9 (citing Ex. 1009, 166; Ex. 1003 ¶¶ 45–46). Because the drive motors are the focus of Petitioner's reliance on the 2010 904 Operating Manual, our summary below centers on that feature.

Figure 211 of the 2010 904 Operating Manual is reproduced below:

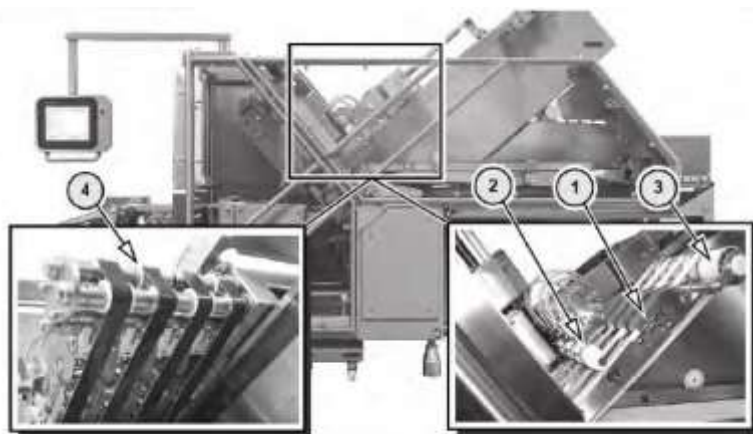


Fig. 211 Product guide

Figure 211 illustrates elements of the CCS 904-02 slicer's drive unit. Ex. 1009, 166.

Figure 211 shows support frames (element 1), a cylinder holder (element 2), and a standard drive unit (element 3) or an optional drive unit with separate

drives (element 4). Ex. 1009, 166. With the standard drive unit, all tracks of the product guide are driven at the same speed by the drive unit. *Id.* In the optionally available version of the slicer with separate drives, all tracks of the product guide can be individually driven with different speeds. *Id.*

C. Insufficiency of Showing that the 2006 904 Operating Manual and 2010 904 Operating Manual Qualify as Printed Publications

A petitioner may assert unpatentability of a claim of a challenged patent “only under a ground that could be raised under section 102 or 103 and only on the basis of prior art consisting of patents or *printed publications.*” 35 U.S.C. § 311(b) (*italics added*). A threshold, disputed issue in this case is whether Petitioner has made an adequate showing that the 2006 904 Operating Manual and the 2010 904 Operating Manual qualify as prior art printed publications within the meaning of the statute. *See* Pet. 20–26; Resp. 4–23; Reply 1–9; Sur-Reply 1–9.

1. Legal Standards

In determining whether a reference qualifies as a printed publication, “[t]he key inquiry is whether or not a reference has been made ‘publicly accessible.’” *M&K Holdings, Inc. v. Samsung Elecs. Co.*, 985 F.3d 1376, 1379 (Fed. Cir. 2021) (quoting *In re Klopfenstein*, 380 F.3d 1345, 1350 (Fed. Cir. 2004)); *In re Hall*, 781 F.2d 897, 898–99 (Fed. Cir. 1986). “A reference will be considered publicly accessible if it was ‘disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence can locate it.’” *Medtronic, Inc. v. Barry*, 891

F.3d 1368, 1380 (Fed. Cir. 2018) (quoting *Kyocera Wireless Corp. v. Int’ Trade Comm’n*, 545 F.3d 1340, 1350 (Fed. Cir. 2008)); *Acceleration Bay, LLC v. Activision Blizzard Inc.*, 908 F.3d 765, 772 (Fed. Cir. 2018) (citing *Jazz Pharm., Inc. v. Amneal Pharm., LLC*, 895 F.3d 1347, 1355–56 (Fed. Cir. 2018)).

At the institution stage, the operative question is whether a petitioner has established a reasonable likelihood that a reference is a printed publication. *Hulu, LLC v. Sound View Innovations, LLC*, IPR2018-01039, Paper 29, 21 (PTAB Dec. 20, 2019) (precedential). This differs from the standard in a final written decision, at which point “the petitioner bears the burden of establishing by a preponderance of the evidence that a particular document is a printed publication.” *Nobel Biocare Servs. AG v. Intradent USA, Inc.*, 903 F.3d 1365, 1375 (Fed. Cir. 2018) (citing *Medtronic*, 891 F.3d at 1380).

2. Summary of Petitioner’s Contentions

Petitioner asserts that the “[t]he 2006 904 [Operating Manual] is an operations manual for the Weber 904 food slicer” and that the 2010 904 Operating Manual “is a later version of the first 904 manual.” Pet. 3, 9. Petitioner presents testimonial evidence to support its assertions that the Weber 904 food slicer was sold to the general public at least as early as November 15, 2007, and that the 2006 904 Operating Manual “was shipped with each 904 slicer sold between November 15, 2007, and May 2009.” *Id.* at 21 (citing Ex. 1011 ¶¶ 11–12; Ex. 1010 ¶¶ 13–20). According to Petitioner, paper and electronic copies of the 2006 904 Operating Manual accompanied each of the forty-nine 904 slicers delivered to customers

during that period, of which eleven were delivered within the United States. *Id.* at 22 (citing Ex. 1011 ¶ 16; Ex. 1010 ¶ 16).

Petitioner further asserts that the 2006 904 Operating Manual was available to interested members of the public upon request. *Id.* at 23–24 (citing Ex. 1011 ¶¶ 4, 12; Ex. 1010 ¶ 21). Petitioner contends that the advertising and magazine articles announcing the release of the 904 slicer made interested members of the public aware of the 904 slicer and, therefore, the 2006 904 Operating Manual. *Id.* at 24 (citing Ex. 1011 ¶ 13). Petitioner further contends it “routinely allowed members of the public to inspect the 904 Manuals at trade shows” and provides testimonial evidence in support of its contention. Reply 8 (citing Ex. 1061 ¶¶ 3–15; Ex. 1060 ¶¶ 33–43).

Petitioner presents similar arguments and evidence to support the public accessibility of the 2010 904 Operating Manual. *See* Pet. 25–26. In particular, Petitioner argues that the 2010 904 Operating Manual accompanied each of the five 904 slicers that were sold between February 15, 2010, and May 2010, and that the 2010 904 Operating Manual was available to the public upon request at least as early as February 15, 2010. *Id.* (citing Ex. 1011 ¶¶ 19–26; Ex. 1010 ¶¶ 19–27; Ex. 1016 ¶ 17).

Petitioner argues that the facts of this case are similar to *In re Enhanced Security Research, LLC*, 739 F.3d 1347 (Fed. Cir. 2014) (“*Enhanced Security*”) holding that a manual for a software product was a “printed publication” because of a date inscription, a declaration by the CEO of the software company that members of the public showing an interest in buying or licensing the software product could have obtained

the manual on request, advertisements of the product, and that the product was sold and installed with a dozen customers. *Id.* at 1354–55; Pet. 24; Reply 1–2.

3. *Summary of Patent Owner’s Contentions*

Patent Owner argues that Petitioner’s showing is insufficient because the 904 Operating Manuals were subject to confidentiality agreements. Resp. 10–14 (citing Ex. 1005, 2; Ex. 1009, 2). Particularly, Patent Owner contends an inscription in the 904 Operating Manuals required they could not be “transferred in any way.” Patent Owner further argues that Petitioner’s General Sales and Delivery Terms and Conditions (“Terms and Conditions”) prohibited distribution of the 904 Operating Manuals without consent. Resp. 12–13 (citing Ex. 2001, Section X.1).

Furthermore, Patent Owner contends that there was an expectation of confidentiality of product manuals in the industry. Resp. 14–18 (citing Ex. 2002 ¶¶ 3–8). Patent Owner contends that its assertion is supported by its own sales contracts as well as those of others in the industry. *Id.* at 15–17 (citing Ex. 2003, 7; Ex. 2004, § 1.2; Exs. 2005–2013). Patent Owner argues that the evidence shows that customers treated the 904 Operating Manuals as confidential, in one instance storing them in a locked and caged room inside a larger facility requiring separate key-card access. *Id.* at 17 (citing Ex. 2018, 36:2–37:4).

Patent Owner asserts the 904 Operating Manuals were not “otherwise made available” to skilled artisans. Resp. 18–23. Specifically, Patent Owner contends that Petitioner “has not shown it had a policy to provide the 904 Operating Manuals upon request to ‘interested persons.’” *Id.* at 19–20 (citing Ex. 1010 ¶

21). Patent Owner also contends that “interested persons” would have found the price of a 904 slicer to be prohibitively high and therefore practically inaccessible. *Id.* at 21–23. Patent Owner further asserts that Petitioner did not show that any of the customers that received access to the 904 Operating Manuals were “persons interested and ordinarily skilled in the subject matter or art.” *Id.* at 22 (citing *Acceleration Bay, LLC v. Activision Blizzard Inc.*, 908 F.3d 765, 772 (Fed. Cir. 2018)).

Patent Owner contends the facts of this case are more similar to *Cordis Corp. v. Boston Sci. Corp.*, 561 F.3d 1319, 1333 (Fed. Cir. 2009) than they are to *Enhanced Security*, the case on which Petitioner relies. Resp. 7–8. *Cordis* held that limited distribution can make a work publicly accessible, but a binding agreement of confidentiality may defeat a finding of public accessibility, and that professional and behavioral norms may establish a reasonable expectation that information will not be copied or further distributed. *Acceleration Bay*, 561 F.3d at 1333.

4. *Analysis*

“[W]here a distribution is made to a limited number of entities, a binding agreement of confidentiality may defeat a finding of public accessibility.” *Cordis*, 561 F.3d at 1333. We first consider whether the 904 Operating Manuals were distributed to a limited number of entities. The Petition evidence shows that distribution of the 2006 904 Operating Manuals was made to seven unique customers in the United States (Ex. 1016 ¶ 19), and that distribution of the 2010 904 Operating Manuals was made to three unique customers worldwide (Ex.

1011, Appendix G) from October 2007 to May 2010. Pet. 22–24; Resp. 9; Paper 8, 12–13, 16–17 (Preliminary Response); Ex. 1011 ¶¶ 16, 19; Ex. 1016 ¶ 19. Accordingly, the 904 Operating Manuals were distributed to ten unique entities.

Petitioner indicates it sold 49 slicers worldwide which would have been accompanied by paper and electronic copies of the 2006 904 Operating Manual (Pet.22 (citing Ex. 1011 ¶ 15; Ex. 1010 ¶ 15), and an additional five slicers which would have been accompanied by copies of the 2010 904 Operating Manual (Pet. 26 (citing Ex. 1011 ¶¶ 19–26; Ex. 1010 ¶¶ 19–27). The Petition appears to focus more on the *numbers* of 904 Operating Manuals distributed whereas *Cordis* is concerned with whether a limited number of *entities* received product manuals. 561 F.3d at 1333.

At the hearing, Petitioner contended that the 2006 904 Operating Manuals were disseminated to 36 unique entities before the critical date. Tr. 6. Petitioner does not show, however, where this number is supported in the record.

From the evidence presented in the Petition, under *Cordis*, Petitioner has not shown that the distribution of the 904 Operating Manuals was to more than a “limited number of entities.” Petitioner relies on *Enhanced Security*, but that case involved distribution to a dozen customers, which is slightly more than the Petition evidence in this case or in *Cordis*. Petitioner does not show that distribution of the 904 Operating Manuals to ten unique customers exceeds a “limited number of entities” under the circumstances presented here. Consequently, following *Cordis*, we proceed to consider the matter of confidentiality.

Petitioner relies on its expert and employees in asserting that the 2006 and 2010 904 Operating Manuals were publicly available, and not confidential. Pet. 21–26; Ex. 1003 (Richard Hooper) ¶¶ 55–73; Ex. 1010 (Jörn Schreiber) ¶¶ 2–27; Ex. 1011 (Carsten Reisz) ¶¶ 2–26; Ex. 1016 (Frank Rypel) ¶¶ 2–30; Ex. 1060 (Timo Rotter) ¶¶ 2–46; Ex. 1061 (Theodor Horst) ¶¶ 2–15. These declarants testify about shipping copies of the 904 Operating Manuals along with slicer machines to customers. Ex. 1010 ¶ 4; Ex. 1011 ¶ 4; Ex. 1016 ¶ 7; Ex. 1060 ¶¶ 7–9. They also testify that the 904 Operating Manuals were not confidential and were freely available upon request. Ex. 1010 ¶ 23; Ex. 1011 ¶ 20; Ex. 1060 ¶ 12.

Patent Owner points to inscriptions in the 904 Operating Manuals and contends they conflict with the declarants’ testimony concerning the confidential status of the 904 Operating Manuals. Resp. 10–12. The 2006 904 Operating Manuals bear the following inscription:

© WEBER Group Without the written authorisation of the WEBER Group, neither the operating manual nor any portion thereof may be reproduced or transferred in any way. The user may copy the operating manual for internal use or print it from CD.

Ex. 1005, 2. The 2010 904 Operating Manuals bear a similar inscription. Ex. 1009, 2.

Effectively, the inscriptions require confidentiality because no portion of the 904 Operating Manuals may be “transferred in any way” without “the written authorisation” of Petitioner. Further, the user’s copying of the 904 Operating Manuals is limited “for internal use” meaning it cannot be disclosed outside

of the receiving entity. By their plain language, the inscriptions require the recipient to keep the 904 Operating Manuals in confidence.

We also agree with Patent Owner that confidentiality is required by Petitioner's Terms and Conditions covering sales of 904 slicers. Resp. 12–14 (citing Ex. 2001). The Terms and Conditions read as follows:

X. Intellectual Property Rights

1. Cost estimates, drafts, drawings and other documents remain the property of Seller. The comprehensive copyright with all associated rights to all documents and information transferred during the contractual relationship belongs exclusively to Seller, even if these objects were created based on specifications or assistance from Buyer. Such objects may only be made accessible to third parties with the consent of Seller. Drawings and other documents associated with the offers are to be returned immediately upon request or if the order is not granted.

Ex. 2001 § X.1. Thus, according to the Terms and Conditions, Petitioner (as “Seller”) maintains proprietary rights in all documents (including the 904 Operating Manuals) transferred to a customer (i.e., “Buyer”), and the customer may only make the documents accessible to third parties with Petitioner's consent. Furthermore, immediate return of documents is required if an order is not granted. In other words, the Terms and Conditions restrict transfer of documents outside of the recipient and in essence constitute a confidentiality agreement.

Petitioner's declarant testifies that the documents referenced in the Terms and Conditions refer to pre-

sale documents only, and that Petitioner's practice was to mark such documents "confidential" to indicate they were to be subject to confidentiality restrictions of the Terms and Conditions. Ex. 1060 ¶¶ 14–16. The Terms and Conditions, however, do not mention anything about confidential and non-confidential classes of documents or marking documents "confidential." Instead, they cover "all documents and information transferred during the contractual relationship." Ex. 2001 § X.1. Petitioner has not explained adequately how the alleged different classes of documents or its practice of marking documents "confidential" might be consistent with its Terms and Conditions.

We further observe that Petitioner's evidence that the 904 Operating Manuals were not confidential stems primarily from the testimony of its employees, each of whom have an interest in the outcome of this case because of their work relationship with Petitioner. Ex. 1010; Ex. 1011; Ex. 1016; Ex. 1060; Ex. 1061.

Furthermore, when a declarant's testimony conflicts with documentary evidence, such as the confidentiality provisions contained in the 904 Operating Manual inscriptions and the Terms and Conditions (Ex. 1005, 2; Ex. 1009, 2; Ex. 2001, Section X.1), we lean toward drawing our conclusions from the documentary evidence. *U.S. v. U.S. Gypsum Co.*, 333 U.S. 364, 395–396 (1948) (rejecting testimony in conflict with documentary evidence). This is because the documentary evidence was prepared contemporaneously in the normal course of business, whereas the declarants' testimony has been given retrospectively with litigation in mind.

Petitioner introduces the testimony of a customer's employee, Mr. David Frett, who states that he received 904 Operating Manuals along with shipments of 904 slicers from Petitioner at the customer's plant facilities. Ex. 1017 ¶¶ 3–10. He testifies that the 904 Operating Manuals were kept in the maintenance shop library of customer's plant facility. *Id.* ¶ 4. At his deposition, however, he indicated that entry into the plant facility required an access badge. Ex. 2018, 30:20–32:12. He referred to the library within the facility as a “maintenance crib”—a wire cage and locked door accessible only by certain employees. *Id.* at 33:17–41:8. He testifies that he was not aware of anyone that was not an employee of the customer requesting access to the library, and that the library was not available to the public. *Id.* at 41:5–43:12.

Mr. Frett's testimony establishes that the particular customer he worked for did not treat the 904 Operating Manuals as publicly accessible, but maintained them under at least two layers of security requiring badge access and a key to unlock the door of a caged room (“crib”) housing the 904 Operating Manuals. Mr. Frett further establishes that only certain employees were permitted to access the 904 Operating Manuals. Mr. Frett is the only person on record to testify on behalf of a purchaser of a 904 slicer.

Petitioner's employees testify that 904 slicers were shipped to trade shows along with copies of the documentation, including the 904 Operating Manual. Reply 8; Ex. 1060 ¶¶ 35–38; Ex. 1061 ¶¶ 5–6. Petitioner's employees testify that “customers and other interested persons” (including potential customers, suppliers, service partners, installers,

secondary market purchasers, and academics or students conducting research) attend trade fairs, and that they are permitted to view documentation, including the 904 Operating Manual, upon request. Ex. 1060 ¶ 39; Ex. 1061 ¶¶ 5, 7. Petitioner's employees testify that they would show the 904 Operating Manual two to five times per day at every trade fair that Petitioner attended. Ex. 1060 ¶ 39; Ex. 1061 ¶ 7. Mr. Horst recalls one instance in which he showed the 904 Operating Manual to a potential customer at a tradeshow who later bought a 904 slicer. Ex. 1061 ¶ 10. Petitioner's employees also testify that Petitioner would permit viewing of the 904 Operating Manual upon request of a visiting customer or other interested person at Petitioner's factory demonstration rooms. Ex. 1060 ¶¶ 42–44; Ex. 1061 ¶¶ 13–15.

The Petition contains no mention of showing the 904 Operating Manuals at trade shows or demonstration rooms, and the first time this evidence was mentioned was in the Reply. Reply 4. We note that Exhibits 1060 and 1061 exceed the proper scope of a Reply as required under 37 C.F.R. § 42.23(b), and we, therefore, do not have to consider this evidence.

Nevertheless, even if we were to consider the evidence, we find it insufficient to establish that the 904 Operating Manuals were accessible to the interested public. Specifically, the evidence concerning trade shows and demonstration rooms contradicts other evidence on this record. For example, Patent Owner contends that only customers, and not the general public, attended Petitioner's events at trade shows and demonstration rooms. Sur-Reply 9 (citing Ex. 2029, 54:16–55:11 (cross-examination of Theodor Horst)). Patent Owner asserts that Petitioner's showrooms were open to

customers by invitation only. *Id.* (citing Ex. 2029, 79:19–80:2). Patent Owner further contends Petitioner’s evidence is the “say-so” of its witnesses, and that Petitioner has not shown that the manuals shown at trade fairs had the same disclosure as the 904 Operating Manuals on which Petitioner relies in this case. *Id.* (citing Ex. 2029, 33:3–8, 27:14–21). We agree with Patent Owner that these considerations undermine Petitioner’s proffered evidence.

We further observe that Petitioner does not indicate which parts of the 904 Operating Manuals were shown to “customers and other interested persons” at trade fairs and demonstration rooms. Particularly, Petitioner does not indicate that customers were shown the features of the 904 slicers that are in issue in this case. There is no evidence that any 904 Operating Manual was ever freely given out to any attendee or visitor; instead, it appears that the 904 Operating Manuals remained in Petitioner’s possession. Moreover, the confidentiality restrictions in the 904 Operating Manuals contradict Petitioner’s assertions that the Manuals were freely available for inspection by attendees of the trade shows or demonstration rooms. Consequently, even if we could consider Petitioner’s new evidence, it would be insufficient to establish that the 904 Operating Manuals used in Petitioner’s challenges were publicly available.

Petitioner’s declarant, Mr. Horst, indicates that a former intern with Petitioner who later became a university student requested to use the 904 Operating Manual for supporting references in a thesis, and that the student was able to get a release from Petitioner to use excerpts from the 904 Operating Manual in his thesis. Ex. 2029, 72–75. What excerpts those were;

their relevance, if any, to the features Petitioner relies upon here; and what restrictions of confidentiality, if any, applied to the intern-student because of his former employment with Petitioner, are not explained in the record. Consequently, this evidence is of little value in determining public accessibility of the 904 Operating Manuals.

Enhanced Security held that advertising of a product had some bearing on determining that the corresponding manual was publicly available. *Enhanced Security*, 739 F.3d at 1355. Petitioner states that there was publicity, such as advertising and magazine articles, surrounding the release of the 904 slicer. Pet. 24 (citing Ex. 1011 ¶ 13). The advertisement cited contains no mention of an operating manual, or its availability. Ex. 1011, 893–898 (Appendix E).

In any case, a major difference that distinguishes the facts presented here from *Enhanced Security* is the confidentiality provisions contained in the 904 Operating Manuals and the Terms of Conditions. Ex. 1005, 2; Ex. 1009, 2; Ex. 2001 § X.1. No such confidentiality restrictions were present in *Enhanced Security*.

Cordis states that “[w]here professional and behavioral norms entitle a party to a reasonable expectation” that information will not be copied or further distributed, “we are more reluctant to find something a “printed publication.”” *Cordis*, 561 F.3d at 1333–34 (citing *Klopfenstein*, 380 F.3d at 1351). Patent Owner contends that evidence shows there was an expectation of confidentiality for product manuals in the industry. Resp. 14–18.

Patent Owner's declarant, Mr. Scott Scriven, works for Patent Owner as its Executive Vice President. Ex. 2002 ¶ 1. He was formerly employed by Petitioner at its Kansas City, Missouri location from 1999 to 2013, and was its President from 2006 to 2010. *Id.* ¶ 2. Mr. Scriven testifies that at the time the 904 Operating Manuals were written and distributed, there was an expectation of confidentiality in the industry. Resp. 14 (citing Ex. 2002 ¶¶ 5–8). He testifies that Petitioner would only provide product manuals to customers. *Id.* He further testifies that he is aware of no instance in which a potential customer, supplier, service partner, installer, secondary market purchaser, or academic requested and received a copy of the 904 Operating Manual. *Id.* at 14–15 (citing Ex. 2002 ¶ 3). Patent Owner further indicates that the sales contracts of competitors in the industry had terms and conditions similar to Petitioner's, requiring confidentiality of technical product information, including product manuals. *Id.* at 15–17 (citing Ex. 2003 § 7; Ex. 2004 § 1.2; Exs. 2005–2013).

The security measures that Petitioner's customer used to protect confidentiality of the product manuals, such as locking them inside of a caged room in a facility that could only be accessed with a security badge, also tends to show that the industry recognized the product manuals to be confidential information. *Id.* at 17 (citing Ex. 2014, 76:4–77:6; Ex. 2018, 36:2–37:4).

Further, when asked if he had ever seen a competitor's operating manual for one of its products, Petitioner's declarant, Mr. Horst, testified that he had not seen one in 31 years of working for Petitioner. Ex. 2029, 15, 88–89. The evidence supports Patent Owner's contention that there was an industry norm

to require confidentiality of product manuals for equipment sold to customers.

Kyocera established that the applicable audience for determining whether a document is a printed publication is “persons interested and ordinary skilled in the subject matter or art.” *Kyocera*, 545 F.3d at 1350. Petitioner’s declarants contend that this category of individuals includes potential customers, suppliers, service partners, installers, secondary market purchasers, and academics and students conducting research. Ex. 1060 ¶ 39; Ex. 1061 ¶ 7. Although “persons interested and ordinary skilled” might include some individuals and organizations on the declarants’ lists, it does not include them all. For example, a board member or sales executive may not qualify as an “interested person.” Petitioner does not attempt to refine who constitutes “persons interested and ordinary skilled” for purposes of gauging Petitioner’s evidence of public accessibility.

For the forgoing reasons, we conclude that the Petition does not show by a preponderance of the evidence that the 2006 and 2010 904 Operating Manuals were printed publications. The 904 Operating Manuals’ inscriptions provided for confidentiality of the information contained in them, and Petitioner’s Terms and Conditions reinforce that the Manuals were confidential, and to be held in confidence by customers who bought 904 slicer machines from Petitioner. As all grounds depend critically on the 2006 and 2010 904 Operating Manuals, and Petitioner has not shown the remaining prior art discloses all of the features of the claims of the ’812 Patent, the Petition does not show unpatentability by a preponderance of the evidence of any claim. Nonetheless, for the sake of completeness,

we will address Petitioner's obviousness challenges in a subsequent section.

D. Lindee

Lindee describes a high speed slicing machine for two or more food loaves. Ex. 1006, codes (54), (57). Lindee's high speed slicing machine supports first and second food loaves for movement along parallel loaf paths into a slicing station where both loaves are sliced by a cyclically driven knife blade, the slices being stacked or shingled in groups on a receiving conveyor located below the slicing station. *Id.* Figure 3 is reproduced below:

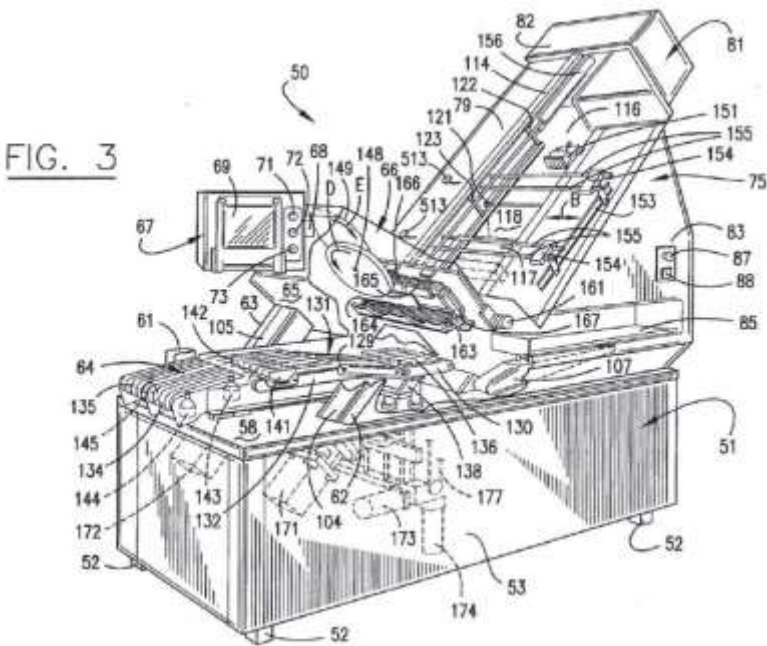


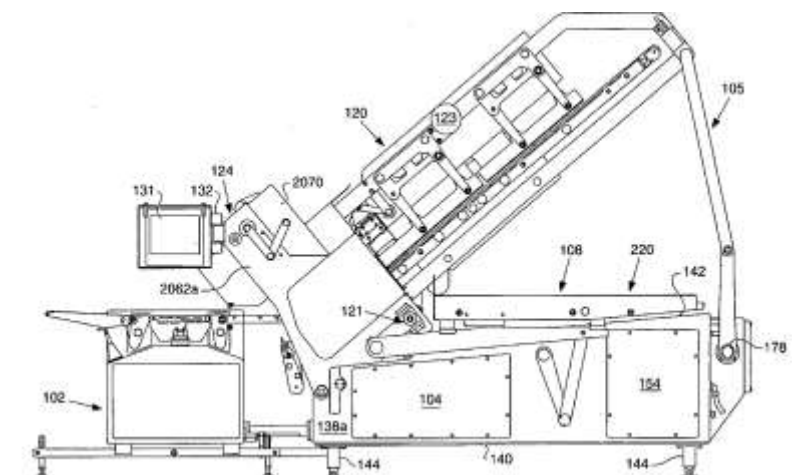
Figure 3 illustrates Lindee's slicing machine. *Id.* at 3:20-33.

Slicing machine 50 in Lindee's Figure 3 includes, *inter alia*: a slicing station 66; a knife blade 149; a loaf feed mechanism 75 which includes a manual feed from a right-hand (far) side of the machine and an automated feed from the left-hand (near) side of the machine; and a near-side clamp or gripper mechanism 151, with a similar gripper mechanism at the far side of slicing machine. *Id.* at 4:4–8:5. Lindee's slicing machine combines manual and automated mechanisms to load food loaves onto the food paths. *Id.*, code (57). The machine's grippers, one on each loaf path, grip the end of a loaf remote from the slicing station, and for each gripper, a loaf feed drive impels the gripper toward the slicing station and then moves the gripper back to a home position, releasing an unsliced loaf butt on the way through a door opening in the loaf support. *Id.*

E. Sandberg

Sandberg discloses an automatically loaded, continuous feed machine with upper and lower conveyor pairs that drive food articles into a cutting plane. Ex. 1012 ¶ 6. A gate positioned in front of the conveyors abuts the food articles to be sliced. *Id.* When the gate lowers, the food articles proceed on the conveyors to the slicing blade and are sliced. *Id.* When the trailing ends of the food articles clear the gate, the gate raises and new food articles are loaded in the feed paths. *Id.* A lift tray assists in loading food articles for slicing in separate lanes. *Id.* at ¶ 17.

Sandberg's Figure 1 is reproduced below.

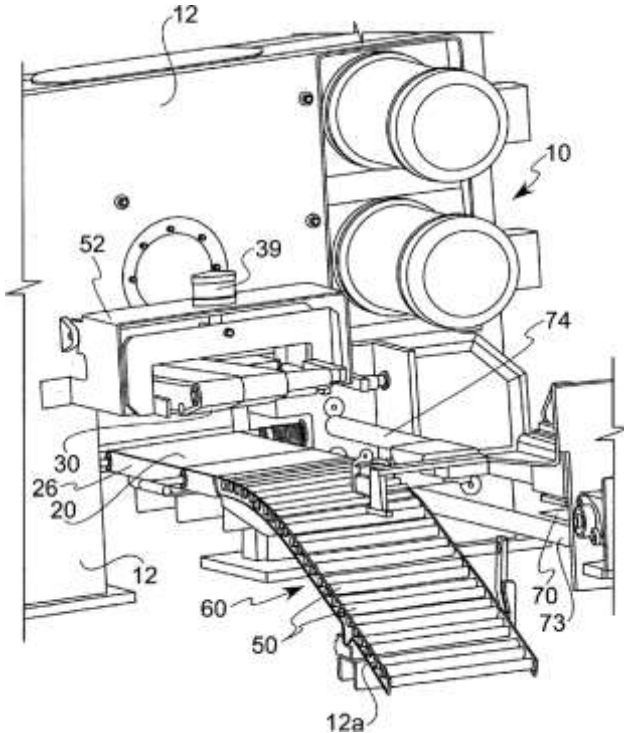


Sandberg's Figure 1 shows a side view of a slicing machine with automatic food article loading apparatus with lift tray.

In Sandberg's Figure 1, slicing apparatus 100 includes, *inter alia*: base section 104, collapsible frame 105, and an automatic food article loading apparatus 108. *Id.* ¶ 120. Apparatus 108 includes lift tray assembly 220, lift tray positioning apparatus 228, and food article lateral transfer apparatus 236. *Id.* ¶¶ 134–137; Figs. 7–9. Lift tray assembly 220 receives food articles to be sliced. *Id.* ¶ 134. Lift tray positioning apparatus 228 pivots the tray assembly 220 to be laterally adjacent to, and parallel with, the food article feed apparatus 120. *Id.* Food article lateral transfer apparatus 236 moves the food articles from the lift tray assembly 220 onto the food article feed apparatus 120 to be fed to the slicing blade. *Id.*

F. Mathues

Mathues discloses a feed mechanism for a food slicing machine. Ex. 1013, codes (54), (57). Mathues's Figure 1 is shown below.



Mathues's Figure 1 shows conveyor belt 70 for driving a food gripper to feed food articles into a slicing station. Ex. 1013 ¶¶ 14–15, 56–58.

Figure 1 shows drive belt 70 for a food gripper to feed a food article into a slicing machine. *Id.* at code (57). Drive belt 70 is supported by rollers, one of which is driven by drive shaft 25 through driven gear 71 connected to servo motor 90. Ex. 1013 ¶¶ 15, 56, 59–63, Figs. 1, 2, 5, 6, 8.

V. ANALYSIS OF GROUNDS

A. *Legal Standards for Obviousness*

In *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966), the Supreme Court set out a framework for assessing obviousness under § 103 that requires consideration of four factors: (1) the “level of ordinary skill in the pertinent art,” (2) the “scope and content of the prior art,” (3) the “differences between the prior art and the claims at issue,” and (4) “secondary considerations” of nonobviousness such as “commercial success, long felt but unsolved needs, failure of others, etc.” *Id.* at 17–18; *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 407 (2007). We discussed the first *Graham* factor in Section II and the second *Graham* factor in Section IV. The record includes no evidence or arguments relating to the fourth *Graham* factor. We address the third *Graham* factor in the obviousness analysis and conclusion below.

B. *Ground 1: Obviousness Based on the 2006 904 Operating Manual, Lindee, and Sandberg*

1. *Claim 1*

In this discussion, we focus on the limitations of claim 1 that are dispositive of this case.

a) *“disposed over”*

Petitioner contends that the 2006 904 Operating Manual discloses limitations [1.2] of claim 1 reciting “a food article loading apparatus,” and limitation [1.3] of “a food article feed apparatus *disposed over* said food article loading apparatus.” Pet. 37–41 (emphasis added). Petitioner contends that Lindee discloses

limitation [1.4] of claim 1 reciting “said food article feed apparatus having a conveyor assembly with independently driven endless conveyor belts,” and limitation [1.5] of claim 1 reciting “wherein each of the conveyor belts is connected to a food article gripper for moving a food article along a food article feed path.” Pet. 41–45.

Petitioner contends that the 2006 904 Operating Manual discloses a product conveyor belt, timing belt, and related actuators and supporting structure which together disclose the claimed “food article loading apparatus” of limitation [1.2] because those elements work together to load food articles into the feed path for slicing. Pet. 39 (citing Ex. 1003 ¶¶ 113–114).

As supporting evidence, Petitioner relies on Figure 5 of the 2006 904 Operating Manual, shown below. *Id.* at 38.

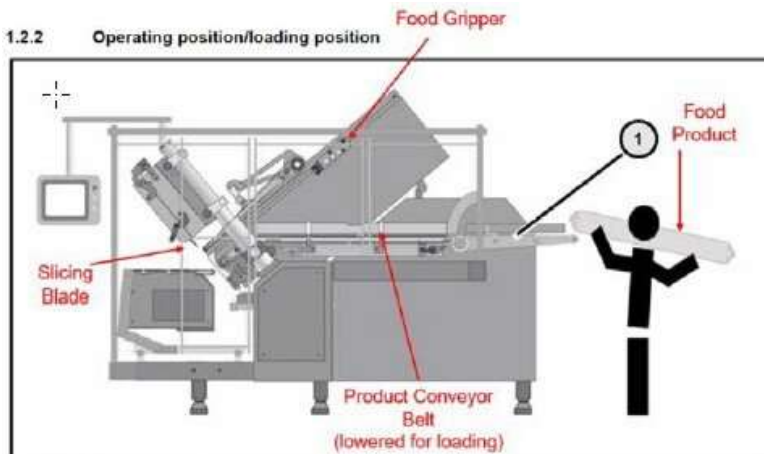


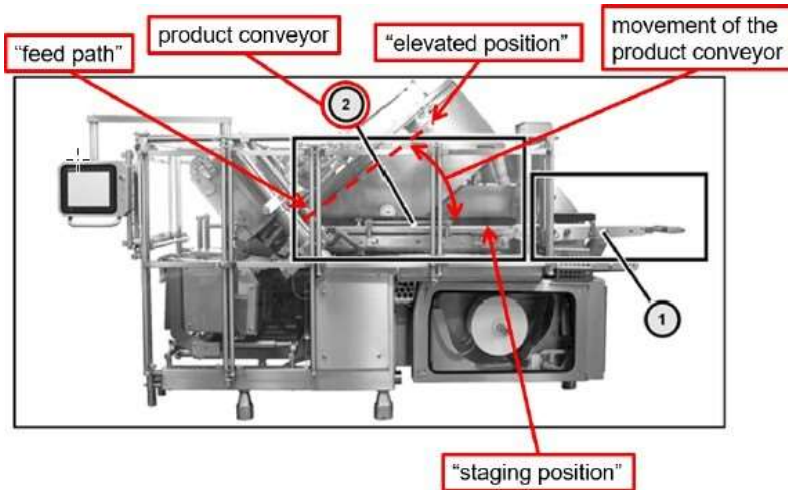
Fig. 5 Operating position/loading position

EX1005, FIG. 5 (annotated).

Figure 5 of the 2006 904 Operating Manual is illustrated above as annotated by Petitioner to show the slicer machine with product conveyor lowered for loading with food product. Pet. 38; Ex. 1005, 14, Fig. 5.

In Figure 5 above, Petitioner's annotations in red show food product being loaded onto a timing belt. The timing belt (element 1 in the figure) feeds food product to a product conveyor belt that has been lowered for loading, as shown in red annotation. Also indicated in red annotation are the food gripper and slicing blade.

Petitioner further presents an annotated version of Figure 14 of the 2006 904 Operating Manual shown below. *Id.* at 39.



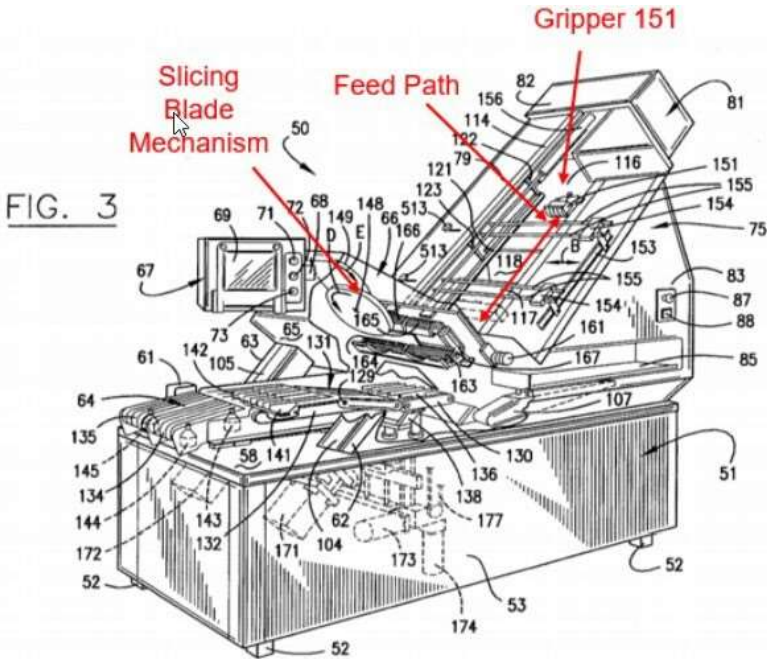
EX1005, FIG. 14 (annotated).

Petitioner's annotated Figure 14 above shows the product conveyor and how it moves from staging position to elevated position to feed the food product along a feed path to the slicer. Pet. 39 (citing Ex. 1005, Fig. 14).

Petitioner contends that in the 2006 904 Operating Manual, the combination of the product holder, upper product guide, and the related actuators and supporting structure, form the claimed “food article feed apparatus” because they comprise an apparatus to feed the food into the slicing blade. Pet. 40 (citing Ex. 1003 ¶ 119; Ex. 1005, 10). The 2006 904 Operating Manual states that the upper product guide presses down on the food article from above and facilitates even transport to the slicing area. Ex. 1005, 15. The product holders grip and feed the products into the outlet and prevent them from falling out during slicing. *Id.*

Petitioner contends that Lindee also discloses a food article feed apparatus and further discloses limitation [1.4] that requires the “food article feed apparatus [to have] a conveyor assembly with independently driven endless conveyor belts.” Pet. 41–42. Petitioner contends that Lindee discloses a food slicer that uses food grippers to drive food products down an inclined support surface to a slicing blade. *Id.* The food grippers are attached to and driven independently by respective timing belts along their feed paths. *Id.* Thus, Petitioner contends Lindee discloses a feed apparatus with independently driven endless conveyor belts, as claimed. *Id.*

To illustrate some of these features, Petitioner relies on Lindee's Figure 3 below. Pet. 41.

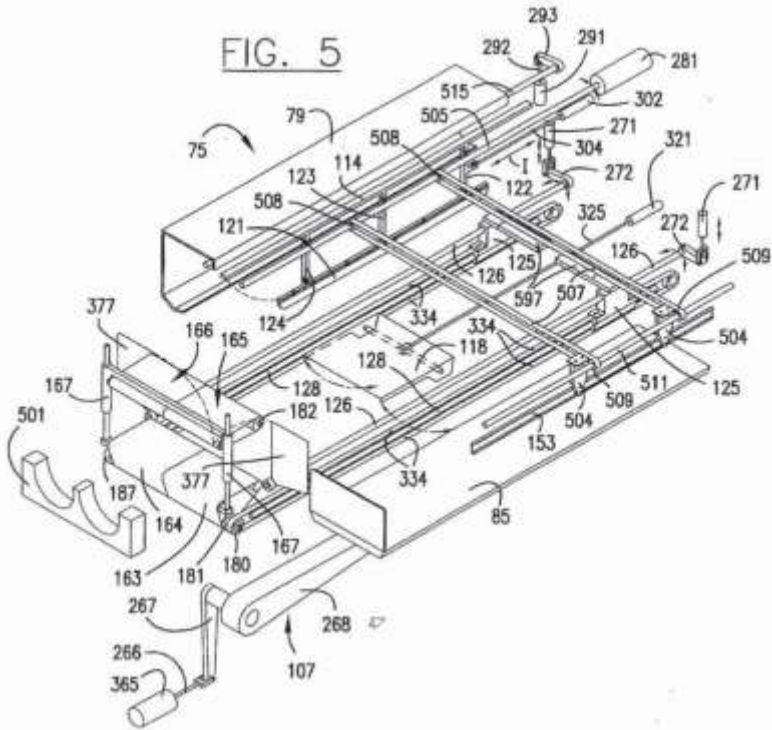


EX1006, FIG. 3 (annotated).

Lindee's Figure 3 above is annotated by Petitioner to show the gripper, feed path, and slicing blade mechanism. Pet. 41 (citing Ex. 1006, Fig. 3).

In Lindee's Figure 3 above, Petitioner annotates in red the gripper 151, feed path, and slicing blade mechanism. *Id.* Petitioner contends timing belt 334 drives the gripper 151. *Id.* at 42. We find no numeral

334 in Lindee's Figure 3. However, Lindee's Figure 5 is reproduced below.



Lindee's Figure 5 above shows two timing belts 334 for driving respective food grippers. Ex. 1006, 11:20-32, Fig. 5.

Lindee's Figure 5 above, and related description, discloses two timing belts 334 for driving respective food grippers. Petitioner contends that Lindee discloses using two or more independently driven gripping mechanisms. Pet. 42.

Petitioner contends a person of ordinary skill in the art would have been motivated to combine Lindee's timing belt gripper actuation system into the 2006 904 Operating Manual to provide mechanical

details to achieve the disclosed function of the product holder (feeding the food loaves into the slicer). Pet. 54 (citing Ex. 1003 ¶ 160). Petitioner also contends the 2006 904 Operating Manual and Lindee are similar systems (Pet. 55); that the combination would have been simple substitution of one known element for another (Pet. 55–56); and use of a known technique to improve a similar device (Pet. 56–57). Petitioner further contends that a person of ordinary skill in the art would have been motivated to add Lindee’s conveyor system into the upper portion of the 2006 904 Operating Manual’s slicer because that is where the track is to support the product holder (Pet. 57).

Patent Owner contends that the combination of the 2006 904 Operating Manual, Lindee, and Sandberg fail to teach or suggest limitation [1.3] of “a food article feed apparatus *disposed over* said food article loading apparatus.” Resp. 46–50; Sur-Reply 16–18 (emphasis added). Specifically, limitation [1.4] of claim 1 requires that the feed apparatus has conveyor belts, and limitation [1.3] of claim 1 requires that those conveyor belts must be “disposed over” the loading apparatus. Patent Owner argues that in Petitioner’s combinations (*see* Section 1.F), Lindee’s conveyor belts are offset to the side of, and not “disposed over,” the loading apparatus, which, according to Petitioner, includes the timing belt, product conveyor, related actuators, and supporting structure on the 2006 904 Operating Manual. Resp. 46–50; Pet. 39. In addition, Patent Owner contends Petitioner’s combinations result in conveyor belts that are out the feed path, contrary to limitation [1.5] of claim 1 reciting “wherein each of the conveyor belts is connected to a food article gripper for moving a food article along a food article feed path.” *Id.*

Patent Owner's contentions are supported by its expert, Dr. Howard, who testifies that one of ordinary skill in the art would not have combined Lindee's lower timing belt system with the upper conveyor system disclosed in the 206 904 Operating Manuals. Ex. 2019 ¶¶ 106–124. Dr. Howard states that Petitioner's expert, Dr. Hooper, bases his obviousness analysis on the incorrect assumption that the 904 Operating Manuals do not disclose how the product holders are translated along the feed path, when in fact the 904 Operating Manuals disclose a ball screw assembly to perform this function. *Id.* at ¶ 106. He further contends that Petitioner does not identify any advantages or address the difficulties of using Lindee's timing belt in the slicer disclosed in the 904 Operating Manuals. *Id.*

Dr. Howard testifies that in the slicer machine described in the 2006 904 Operating Manual, the ball screw actuator that drives the product holder is off to the side, and not disposed over the food article loading apparatus. Ex. 2019 ¶¶ 111–116.

To explain his opinion, he points to Figure 345 of the 2006 904 Operating Manual, reproduced below.

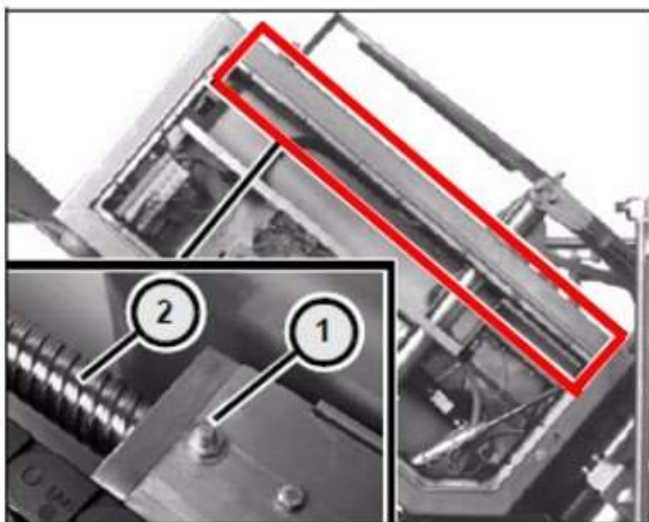


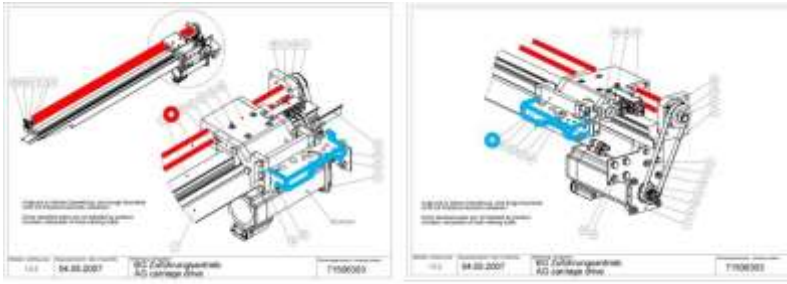
Fig. 345 Lubricating nipple of the ball screw spindle

EX1005, p. 273 FIG. 345 (ANNOTATED)

Patent Owner's annotated Figure 345 of the 2006 904 Operating Manual shows the location of the ball screw within the carriage housing. Ex. 2019 ¶ 111.

In Figure 345 above, Dr. Howard explains that the portion annotated in red is the location of the ball screw assembly within a carriage housing. Ex. 2019 ¶ 111 (citing Ex. 1005, 273, Fig. 345).

To explain how the ball screw translates a carriage connection to a rail supporting the product holders, Dr. Howard provides the following annotated figures from the 2006 904 Parts Manual (Ex. 2023).



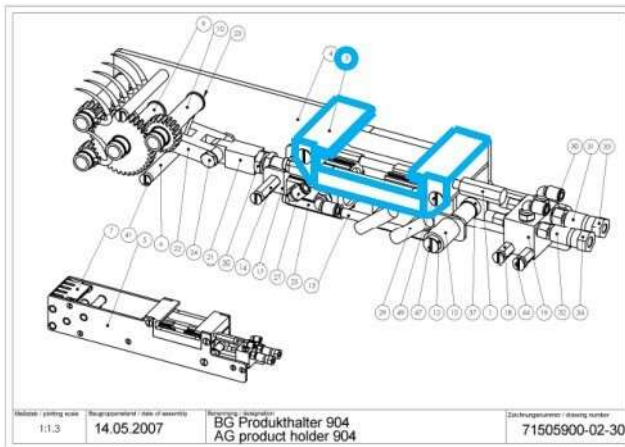
EX2023, 006612 (ANNOTATED)

EX2023, 006613 (ANNOTATED)

Patent Owner's annotated Figures from the 2006 904 Parts Manual shows the ball screw (red) and carriage connection (blue). Ex. 2019 ¶ 114.

In the Figures above, the ball screw is annotated in red, and the carriage connection is annotated in blue. Ex. 2019 ¶ 114. The ball screw translates the connection along the length of the ball screw. *Id.*

Dr. Howard further testifies that the 2006 904 Parts Manual discloses a product holder shown in the Figure below. *Id.*

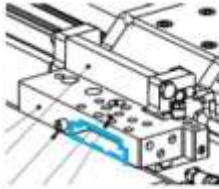


EX2023, 006727 (ANNOTATED)

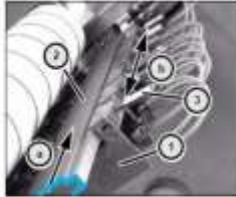
Patent Owner's annotated figure from the 2006 904 Parts Manual shows the clamping plate (blue) of the product holder. Ex. 2019 ¶ 114.

Dr. Howard explains that the figure above shows a clamping plate, annotated in blue, which clamps the product holder onto a support rail. *Id.*

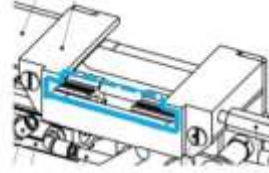
Dr. Howard testifies that a person of ordinary skill in the art would recognize that the shape of the support rail would fill the negative space of the carriage drive connection and the clamping plate of the product holder, as illustrated below. *Id.*



EX2023, 006613 (EXCERPT,
ANNOTATED)



EX1005, p. 118, FIG. 123
(ANNOTATED)



EX2023, 006727 (EXCERPT,
ANNOTATED)

Patent Owner's annotated figures from the 2006 904 Operating Manual and 2006 904 Parts Manual showing carriage connection, rail, and clamping plate of product holder (illustrated in blue). Ex. 2019 ¶ 114.

In the Figures above, the left figure is the carriage drive connection, the center figure shows the rail with product holder in place, and the right figure shows the clamping plate of the product holder. As the blue annotations show, these parts are shaped to fit together.

Dr. Howard's testimony establishes that the ball screw actuator which drives the product holder, is off to the side of the product holder and its feed path,

separated by the rail to which the product holder is clamped. The ball screw is also off to the side of the upper product guide and product bed conveyor corresponding to a slot in the carriage housing, as shown below in Figure 1 of the 2006 904 Operating Manual.

1.1.1 Loading area/infeed area

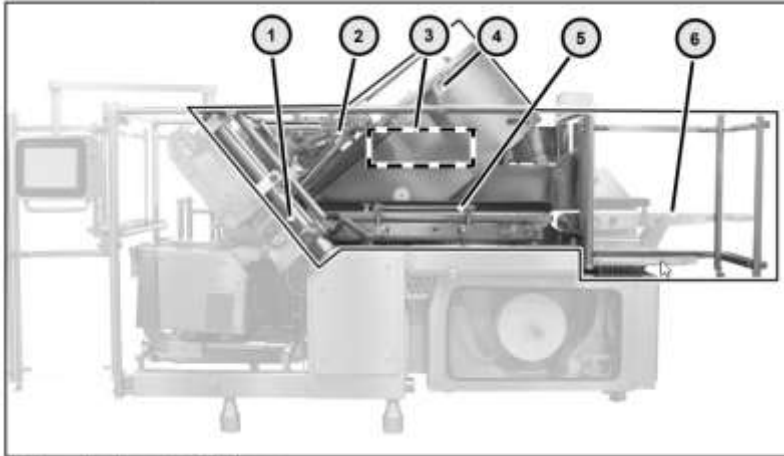


Fig. 1 Loading area/infeed area

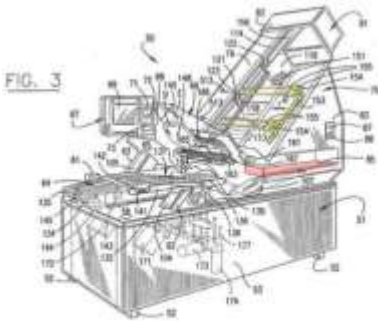
Figure 1 above from the 2006 904 Operating Manual shows various elements of the loading area of the 904 slicing machine. Ex. 1005, 10, Fig. 1.

In Figure 1 above, element 1 is the product bed conveyor; element 2 is the upper product guide; element 3 is the blank holder; element 4 is the product holder; element 5 is the product conveyor; and element 6 is the timing belt.

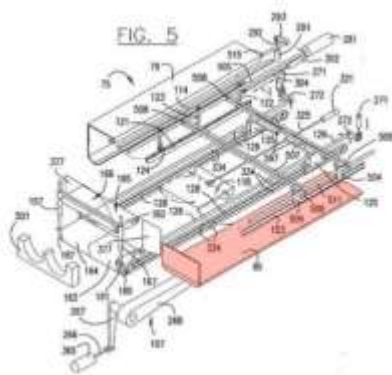
Petitioner's combination involves modifying the slicer of the 2006 904 Operating Manual with Lindee's timing belt system to replace the ball screw actuators of the 2006 904 Operating Manual. Pet. 54–55. Petitioner contends this modification would have been “a simple combination of known prior art elements

(i.e., [Lindee’s] timing belt . . . system . . . and the 2006 904 [Operating Manual’s] product holder) to achieve predictable results (i.e., actuation of the product holder along the feed path).” *Id.* at 55. Petitioner also contends the combination would have been the simple substitution of Lindee’s timing belt system for the 2006 904 Operating Manual’s product holder actuation system. *Id.* at 55–56.

Dr. Howard explains that Lindee uses a sweep mechanism to push one or move loaves horizontally or laterally into the food article feed path of the slicing machine. Ex. 2019 ¶ 129. Dr. Howard provides annotated Figure 3 and Figure 5 from Lindee, shown below, to explain his opinion.



EX1006, FIG. 3 (ANNOTATED)



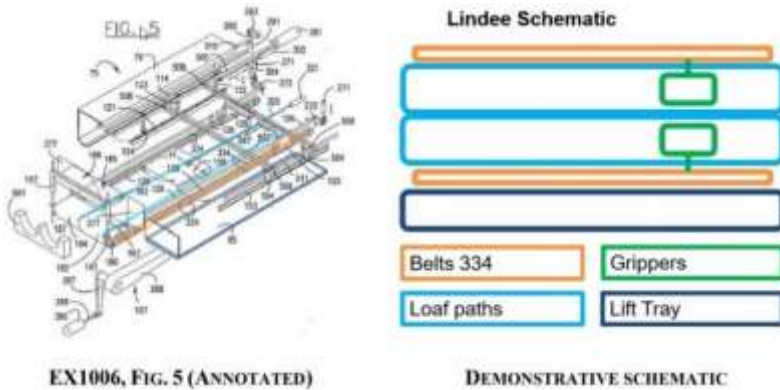
EX1006, FIG. 5 (ANNOTATED)

Lindee’s Figure 3 and Figure 5 annotated by Dr. Howard to show the sweep mechanism (yellow) and lift tray (red). Ex. 2019 ¶ 129.

In Lindee’s Figure 3, shown above, Dr. Howard highlights the sweep mechanism in yellow and the lift tray in red in its lowered position. Ex. 2019 ¶ 129. Dr. Howard also provides Lindee’s Figure 5 to show the lift tray in its elevated position, disposed to the side of the feed path. *Id.*

Patent Owner notes that the background of the '812 Patent describes a slicer machine using a sweep mechanism (Ex. 1001, 1:63–65), and that the change to an in-line stack of components was an advantage recognized by the inventors (*id.* at 2:52–55). Sur-Reply 17. Thus, the '812 Patent distinguishes its invention over previous devices using a sweep mechanism like Lindee's.

Dr. Howard further provides the following illustrations to explain Lindee.



Lindee's Figure 5 and schematic of Figure 5 viewed from above illustrate timing belt 334 (orange), the loaf paths (blue), the lift tray (dark blue), and the grippers (green). Ex. 2019 ¶ 130.

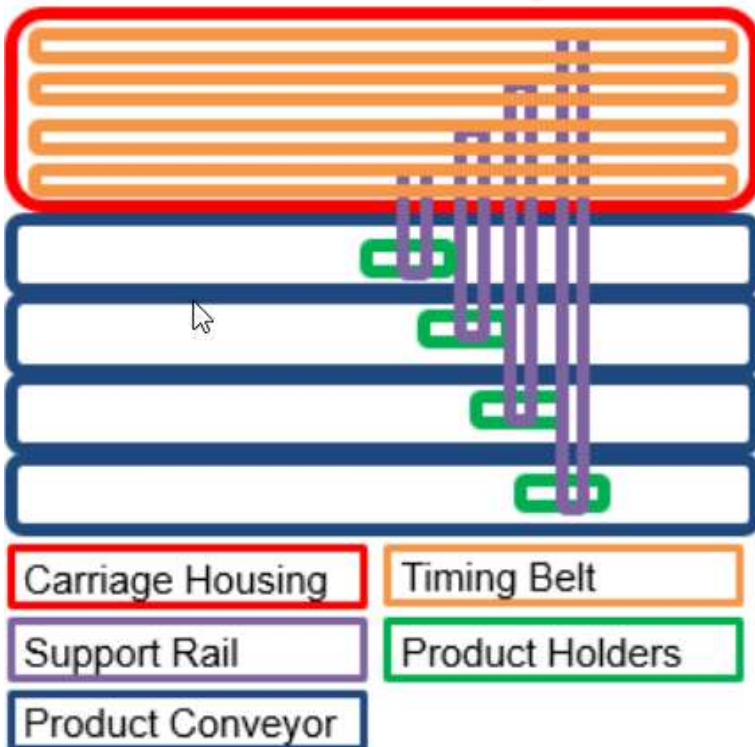
As shown in the above figures, Lindee's timing belt 334 (part of the feed apparatus) (orange) is not "disposed over" the loading apparatus (lift tray) (dark blue) or over the feed path (blue). Ex. 2019 ¶ 130. Instead, Dr. Howard testifies that a person of ordinary skill in the art would understand that belt 334 driving the grippers in Lindee is located to the right of the feed path and to the left of the lift tray in Figure 5 annotated above.

Dr. Howard's testimony makes clear that Lindee's timing belt 334 (part of the feeding apparatus) is not "disposed over" but is located to the side of the lift tray (part of the loading apparatus). Replacing the 2006 904 Operating Manual's ball screw actuator with Lindee's timing belt system would result in Lindee's timing belt system being off to the side of the 2006 904 Operating Manual's product conveyor according to the teachings of both references. Ex. 2019 ¶ 129–133.

We have construed "food article feed apparatus disposed over the food article loading apparatus" in limitation [1.3] to mean that the feed apparatus (including Lindee's timing belt system) must be "positioned above and in vertical and lateral alignment with" the food article loading apparatus (the 2006 904 Operating Manual's product conveyor, timing belt, and related actuators and supporting structure). *See* Section III.C. Limitation [1.3] would not be satisfied if Lindee's timing belt system was positioned off to the side of the 2006 904 Operating Manual's product conveyor, timing belt, related actuators and supporting structure when used to replace or substitute for the Manual's ball screws.

Dr. Howard illustrates Petitioner's combination resulting from combining known elements or simple substitution of Lindee's timing belts for the 2006 904 Operating Manual's ball screws in the following figure.

**Hypothetical Schematic
904 Manual + Lindee + Independent Feed**



Patent Owner's demonstrative schematic shows the result of combining the teachings of the 904 Operating Manual and Lindee together as viewed from above. Ex. 2019 ¶ 132.

In the schematic above, red indicates the carriage housing; orange indicates the timing belts; purple indicates the support rails; green indicates the product holders; and blue indicates the product conveyors, as viewed from above. As shown, Lindee's timing belts replace the 2006 904 Operating Manual's ball screws in the carriage housing positioned to the side of the product conveyor. In this configuration,

Lindee's timing belts are not "disposed over" the product bed conveyor. Though positioned above the product bed conveyor, Lindee's timing belts are not in vertical or lateral alignment with the product bed conveyor. Consequently, the resulting configuration would not satisfy limitation [1.3] of claim 1 of "a food article feed apparatus disposed over said food article loading apparatus" under our construction of "disposed over" which requires that the food article feed apparatus and its conveyor belts (see limitation [1.4] of claim 1) are "positioned above and in vertical and lateral alignment with" the food article loading apparatus (which, according to the Petition, is the product conveyor, timing belt, associated actuators, and supporting structure of the 2006 904 Operating Manual (see Pet. 40)).

In the Reply, Petitioner proposes that one of ordinary skill in the art could extend the upper product guide of the 904 slicer and clamp grippers to the bottom run per Lindee's teachings. Reply 14. According to Petitioner, the existing conveyor structure would then be disposed over the lift tray (product conveyor) of the 904 Operating Manuals. *Id.* However, no such modification was proposed in the Petition. See Pet. 44–45. We consider this to be a new argument that is not within the proper scope of Petitioner's Reply. See 37 C.F.R. § 42.23(b); Consolidated Trial Practice Guide ("TPG"⁸), 73–75.

In addition, Petitioner does not explain how the extended upper product guide would drive the grippers independently according to Lindee, and also maintain downward pressure on the food product to facilitate even transport into the slicing area, which

⁸ <https://www.uspto.gov/TrialPracticeGuideConsolidated>.

the 2006 904 Operating Manual teaches is the purpose of the upper product guide. Ex. 1005, 15, 23. In essence, Petitioner's proposed modification requires the upper product guide to perform an additional function that it was not designed to perform without providing any detail to explain how this would have been accomplished.

Petitioner argues against Patent Owner's arguments that putting Lindee's belt drive system into the 904 slicer would "turn Lindee's timing belt on its head" and require further modification to the drive system. Reply 12–14. Petitioner contends Patent Owner's arguments are based on a legally flawed bodily incorporation of the teachings of one reference into the other. Reply 12–14. Petitioner argues that a conveyor is not dependent on a specific orientation with respect to gravity; that Lindee's conveyor belt system is used for the same purpose in Lindee as it is in the combination; and that the upper product guide of the 904 Operating Manuals is a multi-lane conveyor. *Id.* at 12–13.

Petitioner's argument appears to be based on *In re Keller*, which states

[t]he test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference, nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.

In re Keller, 642 F.2d 413, 426 (CCPA 1981).

We disagree that Patent Owner's arguments are based on bodily incorporation. Dr. Howard testifies

that a person of ordinary skill in the art would not have combined the 904 Operating Manuals and Lindee because of the lack of any advantage in doing so, as well as the difficulties that would be posed thereby. Ex. 2019 ¶ 106. But if one were to attempt such a combination, Dr. Howard recognizes that the 904 Operating Manuals' ball screws and Lindee's timing belts perform the same function of translating food grippers to drive food articles along their feed paths, so one could hypothetically combine the 904 Operating Manuals and Lindee by substituting the timing belts for the ball screws. Ex. 2019 ¶¶ 106, 119, 130. Further, he perceives that the logical place to position the timing belt would be off to the side of the product conveyor because this is where both the 904 Operating Manuals and Lindee teach they should be placed. *Id.* ¶¶ 118, 124, 126, 128–132. He also recognizes that independently driving the food grippers requires multiple timing belts. *Id.* ¶ 132. Thus, Dr. Howard's testimony (and Patent Owner's corresponding arguments) does not merely take the specific mechanisms taught in the references and seek to bodily incorporate them into one another without considering routine adaptations one of ordinary skill would have used to permit them to function together. Rather, Dr. Howard's view of the configuration resulting from combining the 2006 904 Operating Manual and Lindee (see above figure) is entirely consistent with the teachings of both references, which place the conveyor belts to the side of, and not "disposed over," the lift tray.

Petitioner also argues that the 2006 904 Operating Manual does not disclose a ball screw drive system, and that one of ordinary skill in the art would have sought out additional information, which would have been led one to Lindee's timing belt system. Reply 15.

Contrary to Petitioner’s assertion, however, the 2006 904 Operating Manual does disclose a ball screw drive system, as Dr. Howard explains with reference to the 2006 904 Parts Manual. Ex. 1005, 273–274. In this regard, we note that it is permissible for Dr. Howard to use the teachings of the 2006 904 Parts Manual to explain the teachings of the 2006 904 Operating Manual. *Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1372–73 (Fed. Cir. 2019) (one reference may be used to explain the teachings of another reference used in a petition challenge). Dr. Howard’s expert testimony is entitled to more weight because it is consistent with the 904 Operating Manual and 904 Parts Manual considered as a whole, as opposed to Petitioner’s argument which selectively considers the 904 Operating Manual and 904 Parts Manual and ignores or overlooks their teachings concerning the ball screw drive system. *Application of Wesslau*, 353 F.2d 238, 241 (CCPA 1965) (“It is impermissible within the framework of . . .103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.”).

Petitioner argues that even under Patent Owner’s “flawed construction,” the food article feed apparatus (product holder, upper product guide, and associated actuators in the 2006 904 Operating Manual (*see* Pet. 40)) is located above the food article loading apparatus (the product conveyor, timing belt, associated actuators and supporting structure in the 2006 904 Operating Manual (*see* Pet. 39)). Reply 17–19. Petitioner’s view is that the term “disposed over” merely means “higher than or above.” *Id.* at 16–17. We have already addressed that the proper construction of “disposed over” in limitation [1.3] means that the

food article feed apparatus is “positioned above and in vertical and lateral alignment with” the food article loading apparatus and its lift tray assembly (see limitation [1.8]). See Section III.C. Petitioner’s argument is unpersuasive.

Petitioner further argues that the Petition explained that a person of ordinary skill in the art would have been motivated to locate Lindee’s belt drive system for the grippers in the upper portion of the 904 slicer because that is where the product holders (the grippers) and their support structure are located. Reply 18 (citing Pet. 44, 57). Petitioner contends it never suggested implementing belts that were not directly above the loading apparatus. *Id.* at 18–20.

From Figure 1 of the 2006 904 Operating Manual, *supra*, it is clear that the ball screw actuator (part of the feed apparatus) for the product holder (food article gripper) is not “positioned above and in vertical and lateral alignment with” the product conveyor (part of the loading apparatus), but is instead laterally offset when the slicer is viewed from above. Replacing or substituting the ball screw actuator with Lindee’s timing belts would result in the timing belts being laterally offset from the product conveyor, as Dr. Howard explained in his schematic above. Again, both the 2006 904 Operating Manual and Lindee teach that the conveyor belts which drive the grippers are off to the side of the lift tray assembly.

To summarize, limitation 1.3 of claim 1 recites “a food article feed apparatus disposed over said food article loading apparatus.” Ex. 1001, 11:17–18. The combination proposed in the Petition results in the Lindee’s timing belt system replacing or substituting for the 904 Operating Manuals’ ball screws, which are

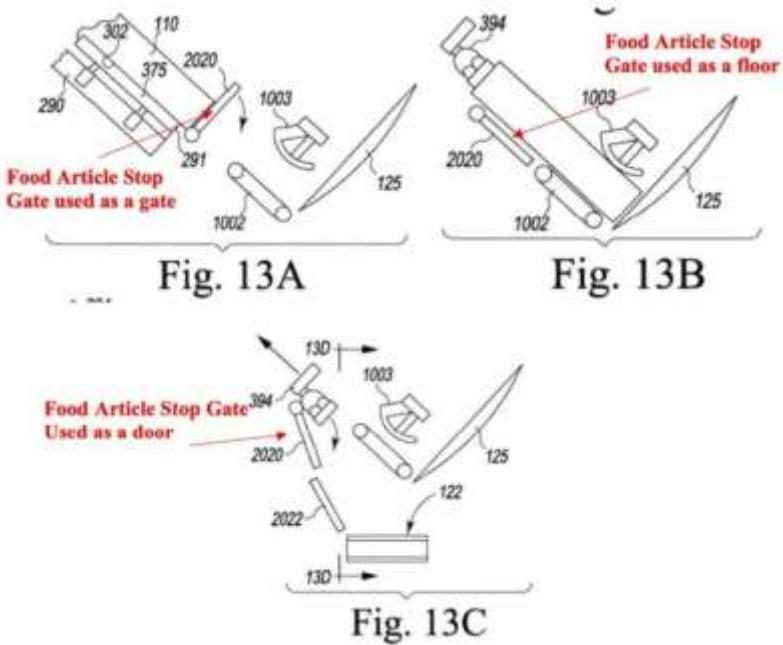
laterally offset from the 904 Operating Manuals' product conveyor. In this combination, Lindee's conveyor belts (part of the food article feed apparatus according to the Petition) would not be "disposed over" (i.e., "positioned over and in vertical and lateral alignment with") the 904 Operating Manuals' product conveyor (part of the food article loading apparatus according to the Petition), as required by limitation 1.3 of claim 1. Consequently, the Petition does not show that limitation 1.3 of claim 1 would be satisfied by combining the 904 Operating Manual and Lindee.

Sandberg is relied upon as teaching the simultaneous loading of food articles. Pet. 57. Petitioner does not allege that Sandberg cures the deficiencies of the combination of the 2006 904 Operating Manual and Lindee noted above.

b) *"the food articles are supported in position along the food article feed path by at least the food article stop gate when the lift tray assembly is moved from its elevated position"*

Limitation [1.9] of claim 1 is reproduced in the above heading. Ex. 1001, 11:33–36. Petitioner contends that the 2006 904 Operating Manual and Sandberg each disclose this limitation. Pet. 51–52.

This limitation corresponds to Figure 13B of the '812 Patent where food article stop gate 2020 acts as a floor supporting the food article in position along the feed path when the lift tray assembly has been lowered from its elevated position. Figure 13B is reproduced along with Figures 13A and 13C below, as annotated by Dr. Howard.



EX1001, FIG. 13A, 13B AND 13C (ANNOTATED)

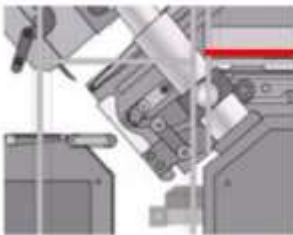
Figures 13A, 13B and 13C, as annotated by Dr. Howard, show food article stop gate 2020 in gate, floor, and door configurations. Ex. 2019 ¶ 61; Ex. 1001, 10:8–13.

In Figure 13B above, food article stop gate 2020 acts a floor supporting the food article in position as it is driven along its feed path to the slicer. *Id.* Petitioner contends that the 2006 904 Operating Manual’s product bed conveyor (corresponding to the claimed “stop gate”) supports the food product by forming a floor, regardless of the position of the product conveyor (corresponding to the claimed “lift tray assembly”). Pet. 51–52 (citing Ex. 1005, 21, Fig. 10; Ex. 1003 ¶¶ 147–149).

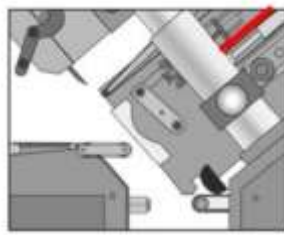
Patent Owner contends that the evidence shows that the 2006 904 Operating Manual’s product

conveyor (and thus, the asserted “stop gate”) does not move from the elevated position at any time during the slicing process. Resp. 53 (citing Ex. 2019 ¶¶ 136–147). Patent Owner’s expert, Dr. Howard, testifies that the 904 Operating Manuals disclose a four-step cycle. Ex. 2019 ¶ 137. Step one of the cycle is to load product onto the timing belt. *Id.* ¶ 138. Step two of the cycle is to transfer the product from the timing belt to the conveyor belt, lift the product conveyor to its elevated position, engage the upper product guide, engage the grippers, and unblock the product bed conveyor. *Id.* ¶ 139. Step three of the cycle is the slicing process. *Id.* ¶ 140. Step four of the cycle is the ejection of the end pieces. *Id.* ¶ 141. The cycle then repeats if further food products are available for processing. *Id.*

Dr. Howard uses a comparison of Figure 5 and Figure 29 of the 2006 904 Operating Manual, shown below, to explain his opinion. *Id.* ¶ 144.



EX1005, p. 14 FIG. 5 (EXCERPT, ANNOTATED) (SHOWING THE LOADING POSITION)



EX1005, p. 40 FIG. 29 (ANNOTATED) (SHOWING EJECTION OF THE END PIECE)

Patent Owner’s annotated Figure 5 above shows the product conveyor of the 2006 904 Operating Manual in the loading position; and annotated Figure 29 above shows the loading conveyor in the elevated position during end piece ejection. Ex. 1005, 14, Fig. 5, 40, Fig. 29.

In Figure 5 and Figure 29 above, Dr. Howard highlights in red the position of the product conveyor (which Dr. Howard refers to as the “lift tray” to follow the claim language). *Id.* Figure 5 shows the product conveyor in its lowered position while loading food product in the first step of the cycle, and Figure 29 shows the product conveyor in its elevated position during ejection of the end piece in the fourth step of the cycle. *Id.* From the foregoing, Dr. Howard testifies that the lift tray assembly is not moved from its elevated position until after the slicing is completed, and after the end piece of the food article has been discarded. *Id.* ¶ 145.

Limitation [1.9] of claim 1 requires that the stop gate support food articles when the lift tray assembly moves from its elevated position. This cannot be the case with the 2006 904 Operating Manual, which shows that the product conveyor is still elevated during end piece ejection after slicing, and the next food articles to be sliced are not yet loaded in the machine. *See* Ex. 1005, Figs. 5 and 29, *supra*. Consequently, Petitioner’s contention cannot be correct that one of ordinary skill in the art “would have appreciated these disclosures indicate moving the product conveyor (the lift tray) downwards from the uppermost elevated position while the product bed conveyor serves as a floor for slicing the ends of the food articles.” Reply 21 (citing Pet. 51–52; Ex. 1005, Fig. 10; Ex. 1003 ¶¶ 148–149; Ex. 1051 ¶¶ 88–89). We agree with Patent Owner that the 2006 904 Operating Manual does not teach or suggest limitation [1.9].

In addition to reliance on the 2006 904 Operating Manual, Petitioner contends that Sandberg discloses limitation [1.9] of claim 1. Petitioner contends that Sandberg discloses that it was known to load new food

products while finishing slicing of the prior food product. Pet. 52 (citing Ex. 1012 ¶ 6; Ex. 1003 ¶ 151). Petitioner contends that Sandberg discloses loading multiple lanes of food products using a food article loading apparatus that pivots from a lowered position to an elevated position. *Id.* citing Ex. 1012 ¶¶ 17, 134–137; Ex. 1003 ¶ 151. Petitioner contends one of ordinary skill in the art would have understood that simultaneous loading improves efficiency by reducing the slicing idle time during reloading. *Id.* (citing Ex. 1003 ¶ 151).

Petitioner cites to a part of Sandberg’s Background of the Invention, which states as follows:

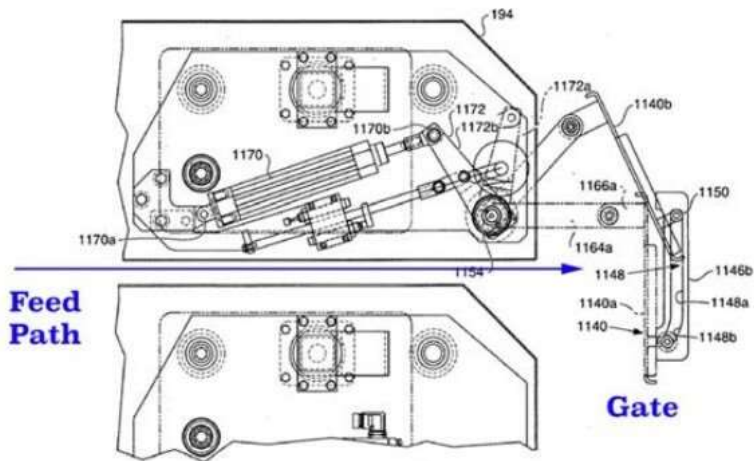
A gate is located in front of the conveyors. The initial food articles are loaded with leading ends abutting the gate. The gate is lowered and the food articles proceed into the conveyors. When the initial food articles are sliced to the extent that the trailing ends of the food articles clear the gate, the gate is raised and new food articles are loaded in the feed paths, held back by the gate. Shortly thereafter the gate is lowered and new food articles slide down to where lead ends of the new food articles abut trailing ends of the initial food articles being sliced. The new food articles are driven into the cutting plane trailing the initial food articles. Food articles are sequentially and continuously loaded in this manner, lead end-to-trailing end, in abutting contact with the preceding food articles.

Ex. 1012 ¶ 6. Patent Owner’s expert, Dr. Howard, observes that the cited paragraph of Sandberg does not disclose that the gate provides support for the food

articles whether raised or lowered. Ex. 2019 ¶ 150. We agree with Dr. Howard.

Addressing Sandberg's machine, Dr. Howard states that Sandberg's "food article gate 1140" moves like a garage door and does not provide support for the food article at any point along the feed path. Resp. 54; Ex. 2019 ¶ 148. Dr. Howard points to Sandberg's Figure 26, reproduced below, as support for this statement.

FIG. 26



EX1012, FIG. 26 (ANNOTATED)

Sandberg's Figure 26 annotated in blue by Patent Owner to show the feed path and lowered and raised gate positions 1140a, 1140b. Ex. 1012, ¶¶ 179–181,

Fig. 26. Figure 26 above shows the gate 1140 in a lowered position marked 1140a, and a raised position marked 1140b. Ex. 2019 ¶ 149. Dr. Howard observes that when lowered, gate 1140 is perpendicular to the food article feed path and cannot support the food articles in position along the feed path. *Id.* When raised, the gate 1140 is lifted above the feed path and out of the way of the food articles, where it provides no support at all. *Id.*

We agree with Dr. Howard's assessment of Sandberg that the gate 1140 does not provide support the food articles in position along the food article feed path, particularly not "when the lift tray assembly is moved from its elevated position" as recited in limitation [1.9] of claim 1. Sandberg's gate 1140, whether lowered or raised, does not support a food article at any point along its feed path to a slicer, let alone when a lift tray assembly is moved from an elevated position. *Id.* at ¶¶ 148–149.

In the Reply, Petitioner contends that Sandberg discloses that it was known to load new food products while finishing slicing of the prior food product. Reply 24 (citing Ex. 1012 ¶ 6; Ex. 1003 ¶ 151; Pet. 52). Petitioner contends that it relied on Sandberg for an operating method, not to provide any structure. *Id.* at 25.

In response, Patent Owner contends that Sandberg describes simultaneous loading in a very different type of slicer from the slicer described in the 2006 904 Operating Manual. Sur-Reply 21 (citing Ex. 2019 ¶¶ 152–153). Specifically, Sandberg discloses

that “[f]ood articles are sequentially and continuously loaded in this manner, lead end-to-trailing end, in abutting contact with the preceding food articles.” Ex. 1012 ¶ 6. We agree with Patent Owner that Sandberg’s teaching of end-to-end loading of food articles is not what is claimed in limitation [1.9] of claim 1 of the ’812 Patent, which requires the gate to support the food article when the lift tray assembly is moved from its elevated position.

Petitioner further argues that the 904 Operating Manuals disclose that the product bed conveyor supports a food article while the product conveyor lowers from its elevated position, allegedly disclosing limitation [1.9]. Reply 19–23 (citing Ex. 1005, Figs. 10, 28, 227; Ex. 1064, 37). However, the figures of the 904 Operating Manuals that Petitioner relies on either (1) do not show the food article in the slicer machine; or (2) do not show the product conveyor. Consequently, we find this evidence insufficient to show that the product bed conveyor of the 904 Operating Manuals supports the food article when the product conveyor moves from its elevated position.

Petitioner contends that it “may introduce new evidence after the petition stage . . . if it is used ‘to document the knowledge that skilled artisans would bring to bear in reading the prior art identified as producing obviousness.’” Reply 25 (citing *Anacor Pharms., Inc. v. Iancu*, 889 F.3d 1372, 1380–81 (Fed. Cir. 2018)). Petitioner contends that a 2008 promotional internet video for the 904 slicers (Exhibit 1068) shows that these slicers were actually operated in the claimed fashion, even under Patent Owner’s claim construction. Reply 25–28 (citing Ex. 1051 ¶¶ 95–98). Petitioner does not explain what claim construction of Patent Owner it is referring to.

Nonetheless, Petitioner contends screen shots from the video show the product conveyor lowering as the product holders are advancing to the slicing station. *Id.* at 26–28 (citing Ex. 1068 at 1:07, 1:09, 1:11).

Patent Owner contends that the Exhibit 1068 video does not document the knowledge that skilled artisans would bring to bear in reading Petitioner’s prior art as producing obviousness. Sur-Reply 22. Patent Owner further contends that Petitioner does not make any assertion that a skilled artisan would have been aware of this video. *Id.* Patent Owner contends that this distinguishes this evidence from that relied on in *Anacor*, where an expert was already “familiar with” a published article before that article was introduced in the IPR. *Id.* (citing *Anacor*, 889 F.3d at 1381).

The Supreme Court has stated that *inter partes* review must proceed in conformance with the petition, and that the Director does not have license to depart from the petition and institute a different *inter partes* review of his own design. *SAS Institute v. Iancu*, 138 S.Ct. 1348, 1355–56 (2018). Petitioner essentially asks us to depart from the Petition by inserting new video evidence that is substantively different from certain parts of the 904 Operating Manuals that were relied upon in the Petition. Specifically, Figure 29 of the 2006 904 Operating Manual was relied upon in the Petition and shows the product conveyor is still elevated after slicing and during end piece ejection. *See* Pet. 6, 9, 47–48, 53, 65, 74; Ex. 1005, 40, Fig. 29, *supra*. Petitioner now contends that the video shows the product conveyor lowering as the product holder is advancing, and food articles are presumably supported by the product bed conveyor. Reply 28–28.

We decline to in effect revise the Petition with this video evidence.

We further determine that the video is new evidence that is not within the proper scope of the Reply. *See* 37 C.F.R. § 42.23(b); TPG, 73–75. The video was not mentioned in the Petition or Response, and comes too late in this proceeding to be considered.

Accordingly, the Petition does not show by a preponderance of the evidence that claim 1 of the '812 Patent is obvious under 35 U.S.C. § 103 over the combination of the 2006 904 Operating Manual, Lindee, and Sandberg.

2. *Claims 2–5 and 8–11*

Claims 2–5 and 8–11 depend from claim 1. For the reasons stated above with respect to claim 1, the Petition does not show that claims 2–5 and 8–11 are unpatentable as obvious over the 2006 904 Operating Manual, Lindee, and Sandberg.

C. Ground 2: Obviousness of Claims 6 and 7 based on the Combination of the 2006 904 Operating Manual, Lindee, Sandberg, and Mathues

Claims 6 and 7 depend from claim 1 of the '812 Patent. Ex. 1001, 12:13–24. Petitioner contends that claims 6 and 7 would have been obvious over the combination of the 2006 904 Operating Manual, Lindee, Sandberg, and Mathues. Pet. 74–78. Petitioner does not show that Mathues overcomes the deficiencies of the combination of the 2006 904 Operating Manual, Lindee, and Sandberg noted above with respect to claim 1. *See* Section V.B. Consequently, the Petition does not show by a

preponderance of the evidence that claims 6 and 7 are unpatentable.

D. Ground 3: Obviousness of Claims 1–5 and 8–11 Based on the 2010 904 Operating Manual, Lindee, and Sandberg

Petitioner asserts that the “2010 904 [Operating Manual] is substantively identical to the 2006 904 [Operating Manual]” except that it adds detail related to the upper product guide that has separate conveyors and drives to permit the conveyors to be independently driven at different speeds. *See* Pet. 78, 80 (citing Ex. 1009, 166). Consequently, Petitioner’s reliance on the 2010 904 Operating Manual in this ground is substantively the same as Petitioner’s use of the 2006 904 Operating Manual discussed in the first ground discussed in Section V.B, except with respect to motivation to combine. *See, e.g., id.* at 79–85 (referring back to ground based on the 2006 904 Operating Manual to explain how the 2010 904 Operating Manual discloses the limitations of claim 1). As to motivation to combine, Petitioner argues that the individual product guide conveyors of the 2010 904 Operating Manual provide additional motivation to incorporate Lindee’s independent gripper conveyor drives. *Id.* at 82–84 (citing Ex. 1006, 9:18–22; Ex. 1003 ¶ 279). We find that the combination of the 2010 904 Operating Manual, Lindee, and Sandberg fails to disclose the limitations [1.3] and [1.9] for the same reasons described above in connection with our analysis of the combination of the 2006 904 Operating Manual, Lindee, and Sandberg. *See* Section V.B. *supra.*

Accordingly, the Petition does not establish by a preponderance of the evidence that claims 1–5 and 8–

11 are unpatentable as obvious over the combination of the 2010 904 Operating Manual, Lindee, and Sandberg.

E. Ground 4: Obviousness Based on the 2010 904 Operating Manual, Lindee, Sandberg, and Matheus

Petitioner contends that the relevant disclosure of the 2010 904 Operating Manual is substantively identical to the 2006 904 Operating Manual, and that the analyses for claims 6 and 7 previously discussed in the Petition apply equally in this ground. Pet. 85 (citing Ex. 1009, 27–28, 33, 107, 110, 166; Ex. 1003 ¶¶ 45–46).

We find that the Petition does not establish by a preponderance of the evidence the unpatentability of claims 6 and 7 over the combination of the 2010 904 Operating Manual, Lindee, Sandberg, and Mathues for the reasons explained in Sections V.B and V.C.

VI. MOTION TO EXCLUDE

Pursuant to 37 C.F.R. §§ 42.62 and 42.64, Patent Owner moves to exclude Exhibit 1051 ¶¶ 61, 95–98, 108; Exhibit 1060 ¶ 35; and Exhibit 1068. Paper 58, 2. Patent Owner contends “Petitioner’s Reply added a new obviousness theory, introduced new evidence to allegedly teach limitations missing from the Petition, and introduced evidence that contravenes the IPR printed publications requirement.” *Id.* Petitioner filed an Opposition to the Motion to Exclude (Paper 59), and Patent Owner filed a Reply to Petitioner’s Opposition (Paper 62).

We agree with Patent Owner that Exhibit 1051 ¶¶ 61, 95–98; Exhibit 1060 ¶ 35; and Exhibit 1068 are new evidence submitted for the first time with the

Reply. Reply 8, 14, 25–28, 31. This evidence relates to Petitioner’s proposed modification to extend the upper product guide in the 904 Operating Manuals (Ex. 1051 ¶ 61) discussed in Section V.B.1.a, *supra*, and Petitioner’s video evidence (Ex. 1051 ¶¶ 95–98; Ex. 1060 ¶ 35; Ex. 1068) discussed in Section V.B.1.b, *supra*. This evidence is proffered to make out or “gap-fill” a prima facie case of unpatentability, and it appears that it could have been submitted with the Petition. At least, Petitioner does not explain why it was not. Accordingly, we do not consider this new evidence in arriving at this decision. *See* 37 C.F.R. § 42.23(b); TPG, 73–75.

The remaining evidence pertains to driver rollers of the conveyor belt recited in claims 5 and 6 of the ’812 Patent (Ex. 1051 ¶ 108). Since we do not reach the arguments presented for claims 5 and 6 in arriving at our decision, we make no determination whether this is new evidence.

Consequently, as we did not rely on any of the evidence that is the subject of Patent Owner’s motion to exclude in arriving at our decision, we dismiss the motion to exclude as moot.

VII. CONCLUSION

We find that the Petition does not establish by a preponderance of the evidence that the 2006 904 Operating Manual or the 2010 904 Operating Manual constitute “printed publications” under 35 U.S.C. § 311(b). The Petition further does not show by a preponderance of the evidence that the challenged claims of the ’812 Patent are unpatentable as obvious because at least limitations [1.3] and [1.9] of claim 1 of the ’812 Patent are not taught or suggested by the prior art references.

In summary,

| Claims | 35 U.S.C. § | Refer- ence(s) | Claims Shown Unpaten- table | Claims Not Shown Unpatent able |
|------------------------|----------------------------|---|--|---|
| 1-5, 8-11 | 103 | 2006 904 Operating Manual, Lindee, Sandberg | | 1-5, 8-11 |
| 6, 7 | 103 | 2006 904 Operating Manual, Lindee, Sandberg, Mathues | | 6, 7 |
| 1-5, 8-11 | 103 | 2010 904 Operating Manual, Lindee, Sandberg | | 1-5, 8-11 |
| 6, 7 | 103 | 2010 904 Operating Manual, Lindee, Sandberg, Mathues | | 6, 7 |
| Overall Outcome | | | | 1-11 |

VIII. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 1–11 of the '812 Patent have not been shown to be unpatentable;

FURTHER ORDERED that Patent Owner's motion to exclude is *dismissed* as moot;

FURTHER ORDERED that the parties shall jointly submit a proposed redacted version of the Final Written Decision (Paper 66) as a confidential Exhibit within 14 days of this Decision. In the absence of such a proposal, at the expiration of 14 days from the date of this Decision, the entirety of the Final Written Decision will be made available to the public.

FURTHER ORDERED that any party seeking judicial review must comply with the notice and service requirements of 37 C.F.R. § 90.2.⁹

⁹ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this Decision, we draw Patent Owner's attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. See 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. See 37 C.F.R. § 42.8(a)(3), (b)(2).

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NOTE: This order is nonprecedential.

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

WEBER, INC.,
Appellant

v.

PROVISUR TECHNOLOGIES, INC.,
Appellee

2022-1751, 2022-1813

Appeals from the United States Patent and Trademark Office, Patent Trial and Appeal Board in Nos. IPR2020- 01556, IPR2020-01557.

ON PETITION FOR REHEARING EN BANC

Before MOORE, *Chief Judge*, LOURIE, DYK, PROST,
REYNA, TARANTO, CHEN, HUGHES, STOLL,
CUNNINGHAM, and Stark, *Circuit Judges*.¹

PER CURIAM.

O R D E R

¹ Circuit Judge Newman did not participate.

Provisur Technologies, Inc. filed a petition for rehearing en banc. 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.

IT IS ORDERED THAT:

The petition for panel rehearing is denied.

The petition for rehearing en banc is denied.

The mandate of the court will issue April 3, 2024.

FOR THE COURT



Jarrett B. Perlow
Clerk of Court

March 27,
2024
Date