

No.

IN THE
Supreme Court of the United States

BROADBAND ITV, INC.,
Petitioner,

v.

AMAZON.COM, INC., AMAZON.COM SERVICES LLC,
AMAZON WEB SERVICES, INC.,
Respondents.

**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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QUESTION PRESENTED

Courts assess whether patent claims are patent-eligible under 35 U.S.C. §101 using the two-step test articulated in *Alice Corp. v. CLS Bank International*, 573 U.S. 208 (2014). At *Alice* Step 1, courts ask whether claims are directed to a patent-ineligible concept, such as an abstract idea. If so, courts consider at Step 2 whether the claims recite additional elements sufficient to transform the claims into a patent-eligible application of the abstract idea.

At *Alice* Step 2, courts look to whether additional claim elements involve more than performance of “well-understood, routine, [or] conventional activit[ies]’ previously known to the industry.” 573 U.S. at 225. Whether claim elements are well-understood, routine, or conventional is a “question of fact.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018), cert. denied, 140 S. Ct. 911 (2020). Federal Rule of Civil Procedure 56(a) prohibits summary judgment where there is a “genuine dispute as to any material fact.” Here, the Federal Circuit affirmed summary judgment of patent ineligibility under §101 despite a genuine factual dispute over whether claim elements were well-understood, routine, or conventional.

This petition presents the same issue as Question 1 of the pending petition in *Island Intellectual Property LLC v. TD Ameritrade, Inc.*, No. 24-461, and should be held for that petition. The question presented is:

Whether there is a patent-specific exception to Rule 56, such that courts may grant summary judgment of patent ineligibility despite genuine disputes of material fact regarding whether claim elements are well-understood, routine, or conventional at *Alice* Step 2.

PARTIES TO THE PROCEEDINGS BELOW

Petitioner Broadband iTV, Inc. was the plaintiff in the district court and appellant in the court of appeals. Respondents Amazon.com, Inc., Amazon.com Services LLC, and Amazon Web Services, Inc. were defendants in the district court and appellees in the court of appeals.

CORPORATE DISCLOSURE STATEMENT

Pursuant to this Court's Rule 29.6, petitioner Broadband iTV, Inc. states that it has no parent corporation and that no publicly held company owns 10% or more of its stock.

STATEMENT OF RELATED PROCEEDINGS

There are no proceedings directly related to this case within the meaning of Rule 14.1(b)(iii).

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Broadband iTV, Inc. (“BBiTV”), 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 court of appeals’ opinion (App., *infra*, 1a-23a) is reported at 113 F.4th 1359. The district court’s opinion granting respondents’ motion for summary judgment (App., *infra*, 24a-67a) is not reported, but is available at 2022 WL 4703425 (W.D. Tex. Sept. 30, 2022).

STATEMENT OF JURISDICTION

The Federal Circuit entered judgment on September 3, 2024 (App., *infra*, 1a, 23a). On November 27, 2024, the

Chief Justice extended the time to file a petition for a writ of certiorari to January 31, 2025. This Court has jurisdiction under 28 U.S.C. § 1254(1).

STATUTORY PROVISION INVOLVED

The Patent Act, 35 U.S.C. § 1 *et seq.*, provides in relevant part:

§ 101. Inventions patentable

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

INTRODUCTION

Section 101 of the Patent Act addresses the inventions that are eligible for patent protection. It states: “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor * * * .” 35 U.S.C. § 101. This Court has held that § 101 contains an “implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014). That exception is applied using a two-step test, commonly called the “*Alice* test.”

At *Alice* Step 1, courts look to whether claims are directed to a patent-ineligible concept, such as an abstract idea. 573 U.S. at 217. If so, courts consider at Step 2 whether the claims recite additional elements sufficient to transform the claim into a patent-eligible application of the abstract idea. *Id.* at 217-218. When considering whether patent claims are directed to a patent-eligible application at Step 2, courts look to whether the additional elements involve more than perfor-

mance of “well-understood, routine, conventional activit[ies]’ previously known to the industry.” *Id.* at 225 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 73 (2012)).

Like other prerequisites to patentability, patent eligibility under §101 turns on “factual determinations.” *Microsoft Corp. v. i4i Ltd. P’ship*, 564 U.S. 91, 96 (2011). Specifically, “whether a claim element or combination of elements is well-understood, routine, and conventional to a skilled artisan in the relevant field is a question of fact.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018), cert. denied, 140 S. Ct. 911 (2020); see also *id.*, 890 F.3d 1369, 1370 (Fed. Cir. 2018) (Moore, J., concurring in denial of rehearing en banc).

Under Federal Rule of Civil Procedure 56, summary judgment is improper where there is a “genuine dispute as to any material fact.” Fed. R. Civ. P. 56(a). Whether a claim element or combination of claim elements is “well-understood, routine, [or] conventional” plainly is material to the *Alice* Step 2 analysis; it is the crux of that inquiry. Yet the Federal Circuit has consistently affirmed or ordered summary judgment of patent ineligibility *despite* the presence of genuine disputes over that question—effectively resolving such disputes itself, rather than allowing juries to do so.

This petition, like the pending petition in *Island Intellectual Property LLC v. TD Ameritrade, Inc.*, No. 24-461, presents the question whether factual disputes at *Alice* Step 2 should be treated the same as other factual disputes for purposes of summary judgment. That question should answer itself. There is no patent-law exception to the Federal Rules. This Court should clarify that—contrary to the Federal Circuit’s entrenched practice—there is no patent-specific excep-

tion to Rule 56 that permits summary judgment despite genuine factual disputes over whether claim elements or combinations of claim elements are “well-understood, routine, [or] conventional” at *Alice* Step 2.

Because Question 1 of the petition in *Island Intellectual Property*, *supra*, is substantially similar to the question presented here, the Court should hold this petition pending its decision in *Island Intellectual Property*, then dispose of this petition as appropriate in light of that decision. See Steven M. Shapiro, *et al.*, *Supreme Court Practice* § 14.6, at 780 (10th ed. 2013).

STATEMENT

I. THE PATENTED TECHNOLOGY

This case involves five BBiTV patents, consisting of two patent families. App., *infra*, 2a. Both patent families are directed to enhanced electronic program guides—specialized software that enables television viewers to navigate vast libraries of “video-on-demand” content to find desired programming. *Id.* at 2a-8a. The program guides at issue present the viewer with eye-catching content listings that can be customized by content providers, such as Disney and NBC, through a web-based content-management system. *Id.* at 2a-3a.

The '026 patent family covers electronic program guides that automatically generate content listings from metadata provided by content providers. App., *infra*, 2a-5a. The '026 patent family claims recite (i) using “templates” to generate program-guide displays automatically, using titles, metadata, and images that content providers supply, and (ii) a web-based content management system (“WBCMS”) for content providers to specify templates and upload metadata. *Ibid.*; see *id.* at 59a.

The '825 patent family covers methods for adjusting the order of categories of listings within a program guide based on a user's viewing history. App., *infra*, 5a-8a. To track viewing history, the invention introduces a log-in process to identify the user. *Ibid.* The claims require (i) tracking a user's viewing history to maintain a profile, and (ii) using the profile to “dynamically reorder[]” the “categories, subcategories, and/or titles displayed” based on anticipated “relevance to the viewer.” C.A.App. 101.

II. PROCEEDINGS BELOW

A. The District Court Grants Summary Judgment of Patent Ineligibility Under §101 Despite Material Factual Disputes at *Alice* Step 2

BBiTV sued respondents for infringing all five patents. App., *infra*, 2a; see 28 U.S.C. §1338(a). Respondents moved for summary judgment, arguing the asserted patent claims were ineligible for patenting under 35 U.S.C. §101. *Ibid.*

1. The district court granted respondents' summary judgment motion. App., *infra*, 2a. In conducting its §101 analysis, the district court applied *Alice Corp. v. CLS Bank International*, 573 U.S. 208 (2014). At *Alice* Step 1, it held the '026 patent family claims were “directed to the abstract idea of receiving hierarchical information and organizing the display of video content accordingly.” App., *infra*, 63a.

At *Alice* Step 2, the district court found that the claims did not constitute a patent-eligible application of that abstract idea, because—in the district court's view—they “recite[d] only generic and conventional components, arranged in a conventional manner, and provide[d] only conventional functionalities.” App., *infra*, 63a. That factual question was hotly disputed: BBiTV's expert testified that it was “unconventional and inventive” at the

time of the invention to offer an “end-to-end solution for content providers to upload [video-on-demand] content and metadata over the Internet where the metadata is used to determine how the [program guide] organizes the [content listings].” C.A.App. 2220. But the district court did not address that testimony. App., *infra*, 63a-66a.

The district court instead invoked inventor testimony that the server that ran the WBCMS was purchased “off the market,” concluding the testimony established that “a WBCMS is conventional.” App., *infra*, 63a. The court did not explain why the fact that the server itself is ordinary compels the conclusion that all the pieces of the system, arranged as a whole, were purely conventional. In particular, the court did not address testimony that, while the inventor purchased the physical server off the market, he “design[ed] the entire web server application that ran on that server.” C.A.App. 3580.

The parties also vigorously disputed whether electronic templates—in particular, the three-layer template claimed in the ’026 patent’s representative claim, C.A.App. 68-69—were purely conventional. See BBiTV. C.A.Br. 39-40, 50-52; C.A.App. 2220. The district court found that use of templates was “routine and conventional.” App., *infra*, 62a. It pointed to testimony of BBiTV’s expert that templates were a “‘known entity.’” *Id.* at 46a. But the expert had not conceded that generating electronic displays from templates, particularly using metadata and images provided by another party, was routine or conventional. C.A.App. 3963-3976.

2. The district court similarly found the ’825 patent family claims ineligible for patenting. At *Alice* Step 1, it held those claims were directed to the abstract idea of “collecting and using a viewer’s video history to suggest

categories of video content.” App., *infra*, 49a. At Step 2, the district court held that the claimed user profile and the introduction of a log-in step were “conventional.” *Id.* at 54a-59a. It declared there was no genuine dispute of material fact that the claims recited conventional databases, servers, and televisions, combined with a generic method of identifying a user. *Ibid.* The court did not identify record evidence establishing that rearranging displays based on the log-in function and users’ viewing history was conventional at the time of the invention. Respondents did not contest the *unconventional* nature of that functionality on appeal. Amazon.C.A.Br. 40-41. Indeed, BBitV’s expert testified that the “ordered combination” of using a log-in process to identify a viewer, tracking a viewer’s selections during viewing sessions, and displaying individualized listings was “*not* a well-understood, routine, and conventional method” at *Alice* Step 2. C.A.App. 2228 (emphasis added). He opined that the ’825 patent claims “improve[d] on prior [video-on-demand] personalization and [did] not merely present generic recitations of technology.” *Ibid.* The district court did not address that expert testimony.

B. The Federal Circuit Affirms

The Federal Circuit affirmed. App., *infra*, 1a-23a. The panel recognized that patent eligibility under §101 may rest on “underlying factual findings.” *Id.* at 10a. It acknowledged that summary judgment is proper only when, “viewing all evidence in the light most favorable to the nonmovant, there is no genuine dispute of material fact.” *Ibid.* It nonetheless affirmed the district court’s conclusions that the claim elements were purely conventional at *Alice* Step 2—despite recognizing that the parties had presented conflicting evidence on that issue.

With respect to the '026 patent family, the Federal Circuit recognized that BBitV advanced “fact and expert testimony regarding the nature of certain features of the claims.” App., *infra*, 17a. The court of appeals did not explain why that fact and expert testimony failed to establish a genuine dispute of material fact. It instead stated only that it “agree[d] with the district court.” *Ibid.* The court of appeals repeated the district court’s assertion that the WBCMS was a “conventional server,” purchased “off the market.” *Id.* at 18a. Like the district court, the court of appeals nowhere addressed the contrary testimony that the inventor had purchased a physical server but had developed the web-server *application* that performed the functions of the claimed invention. *Id.* at 17a-19a; see p. 6, *supra*. The court of appeals also ruled that use of “templates” was “routine” and “well-understood.” App., *infra*, 18a. Like the district court, the court of appeals pointed to expert testimony that templates “were a known entity.” *Id.* at 19a. The court did not address the fact that the expert had not conceded that the claimed use of templates, or the particular three-layer template in many of the claims, was routine or conventional. See *id.* at 17a-19a.

The court of appeals also affirmed the district court’s judgment with respect to the '825 patent family. Like the district court, the court of appeals focused on the patents and their specifications, ignoring expert testimony that the claims “improve[d]” on prior technology by disclosing an arrangement of claim elements that was “not * * * well-understood, routine, and conventional,” C.A.App. 2228. App., *infra*, 21a-23a; see p. 7, *supra*.

**REASONS FOR HOLDING THE PETITION IN
LIGHT OF *ISLAND INTELLECTUAL PROPERTY***

The Court should hold this petition pending its decision on the petition for a writ of certiorari in *Island Intellectual Property LLC v. TD Ameritrade, Inc.*, No.24-461 (petition filed Oct. 21, 2024). Like this petition, Question 1 of that petition asks how Rule 56’s summary judgment standards apply to factual disputes concerning patent eligibility at *Alice* Step 2. If the Court grants review on that issue in *Island Intellectual Property*, it should (following its decision on the merits) consider granting this petition, vacating the Federal Circuit’s judgment in this case, and remanding for reconsideration of whether respondents are entitled to summary judgment of patent ineligibility under the correct legal standard. “When different cases presenting substantially the same issue come before the Court at the same time, the Court may grant review in one case and simply hold the petition or jurisdictional statement in the other case for summary disposition in light of the decision ultimately rendered in the first case.” Steven M. Shapiro, *et al.*, *Supreme Court Practice* §14.6, at 780 (10th ed. 2013).

The issue presented here is substantially the same as the one presented in *Island Intellectual Property*. In *Island Intellectual Property*, the Federal Circuit affirmed summary judgment of patent ineligibility under 35 U.S.C. §101. Pet. for Writ of Cert. 19-20, in No. 24-461. The petition in *Island Intellectual Property* contends the Federal Circuit affirmed the grant of summary judgment despite evidence, including expert testimony, that created genuine disputes regarding facts material to the *Alice* Step 2 inquiry. *Id.* at 5-7, 13-14, 16-18; see *id.* at 21-27. Specifically, the *Island Intellectual Property* peti-

tion asserts that expert testimony, factual findings from the patent examiner, and fact-witness declarations created genuine disputes as to whether certain claim limitations were conventional and routine. *Id.* at 13-14. Given the factual nature of determinations under Step 2 of *Alice*, the petition urges that courts are not free to ignore, resolve disputes over, or make credibility determinations regarding the underlying evidence at summary judgment. *Id.* at 21-27. Question 1 of the *Island Intellectual Property* petition thus asks whether there is a patent-specific exception to Rule 56 that allows courts to resolve genuine factual disputes related to patent eligibility under *Alice* Step 2 at summary judgment. *Id.* at i.

This case presents the same issue as *Island Intellectual Property*, and the petition here should be resolved in accordance with the petition there. Here, as there, the Federal Circuit affirmed summary judgment of patent ineligibility under § 101 despite evidence, including expert testimony, disputing whether the claim elements and claimed combinations of elements were “‘well-understood, routine, [or] conventional activit[ies]’ previously known to the industry.” *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 225 (2014). With respect to the ’026 patent family, the Federal Circuit resolved factual disputes as to whether the claimed system, including the WBCMS and templates, were routine and conventional. App., *infra*, 16a-19a. And as to the ’825 patent, the Federal Circuit resolved factual disputes as to whether the claimed combination, including the log-in process to associate history with particular users rather than the machine being used, was routine and conventional. *Id.* at 21a-23a.

The Court should grant the *Island Intellectual Property* petition to review the Federal Circuit’s departure

from established summary judgment standards. As in this case, the Federal Circuit often professes to apply the Rule 56 standard in §101 cases. See App., *infra*, 10a. But as the *Island Intellectual Property* petition explains—and this case underscores—the Federal Circuit has repeatedly granted or ordered summary judgment notwithstanding genuine factual disputes over whether claim elements or combinations were well-understood, routine, or conventional at *Alice* Step 2. See Pet. for Writ of Cert. 29-33, in No. 24-461 (collecting cases). Despite recognizing that the routine or conventional nature of an element is a “question of fact,” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018), cert. denied, 140 S. Ct. 911 (2020), the Federal Circuit has in practice treated the issue as one for courts to resolve, not juries. That important and recurring question merits this Court’s review.

There is a significant possibility that the Court’s decision in *Island Intellectual Property* will clarify the application of Rule 56 to the *Alice* test and call into question the court of appeals’ decision below. The Court may—and should—conclude that no patent-specific exception permits courts to grant summary judgment of patent ineligibility under §101 where there are genuine disputes of material fact relevant to the *Alice* Step 2 inquiry. Such a holding would be in line with the myriad cases where this Court has rejected patent-specific exceptions to generally applicable legal rules. See, *e.g.*, *SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods. LLC*, 580 U.S. 328, 340 (2017) (“Patent law is governed by the same common-law principles, methods of statutory interpretation, and procedural rules as other areas of civil litigation.”). And such a holding would foreclose the court of appeals’ decision in this case, which

affirmed summary judgment despite the existence of genuine factual disputes.

More broadly, *any* guidance this Court provides in *Island Intellectual Property* regarding *Alice*'s application at summary judgment—and how courts must approach factual disputes in that context—likely will affect the patent-eligibility analysis in this case. The courts below should have an opportunity to reconsider the holding here in light of any such guidance.

CONCLUSION

This petition for a writ of certiorari should be held pending the Court's decision in *Island Intellectual Property LLC v. TD Ameritrade, Inc.*, No. 24-461, and then disposed of as appropriate in light of this Court's disposition of that petition and any merits decision it issues in connection therewith.

Respectfully submitted.

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APPENDIX

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APPENDIX A
UNITED STATES COURT OF APPEALS FOR THE
FEDERAL CIRCUIT

BROADBAND ITV, INC.,
Plaintiff-Appellant,

v.

AMAZON.COM, INC., AMAZON.COM SERVICES
LLC, AMAZON WEB SERVICES, INC.,
Defendants-Appellees.

2023-1107

Appeal from the United States District Court for the
Western District of Texas in No. 6:20-cv-00921-ADA,
Judge Alan D. Albright

Decided: September 3, 2024

JEFFREY A. LAMKEN, MoloLamken LLP, Washington, DC, argued for plaintiff-appellant. Also represented by RAYINER HASHEM; JONATHAN E. BARBEE, BENOIT QUARMBY, New York, NY; DAVID ALBERTI, ROBERT KRAMER, HONG LIN, Kramer Alberti Lim & Tonkovich LLP, Burlingame, CA.

J. DAVID HADDEN, Fenwick & West LLP, Mountain View, CA, argued for defendants-appellees. Also represented by RAVI RAGAVENDRA RANGANATH, SAINA S. SHAMILOV; TODD RICHARD GREGORIAN, San Francisco, CA; JONATHAN G. TAMIMI, Seattle, WA.

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

REYNA, *Circuit Judge*.

Broadband iTV sued Amazon in the Western District of Texas alleging patent infringement of five patents. Amazon moved for summary judgment, arguing that all asserted claims were patent ineligible subject matter under 35 U.S.C. § 101. The district court granted Amazon’s motion, finding the claims were directed to an abstract idea and the patents failed to provide an inventive step that transformed that abstract idea into a patent-eligible invention. Broadband iTV timely appeals. For the following reasons, we affirm.

I. BACKGROUND

A. The Asserted Patents

Broadband iTV (“BBiTV”) owns U.S. Patent Nos. 10,028,026 (’026 patent); 9,648,388 (’388 patent); 10,536,750 (’750 patent); 10,536,751 (’751 patent); and 9,973,825 (’825 patent). Four of the five asserted patents are related—the ’026, ’388, ’750, and ’751 patents (’026 patent family)—and all claim priority to the same patent application. The ’388, ’750, and ’751 patents share a common specification that overlaps significantly with the ’026 patent’s specification. The ’825 patent is unrelated to the ’026 patent family but covers similar technology.

i. ’026 Patent Family

The ’026 patent family generally relates to electronic programming guides for televisions. According to the ’026 patent, “video-on-demand” systems had recently emerged. ’026 patent, 2:13-36. These systems offered an “interactive television service” by allowing a viewer to navigate through a program guide using a remote control

and select a desired video program. *Id.* The '026 patent family seeks to improve existing program guides by automating the creation of a hierarchically arranged, template-based program guide. *Id.* at Abstract, 3:16-4:5. A computer automatically creates the program guide by using video content and associated metadata that content providers upload to a server. *Id.*

For purposes of this appeal, the parties treat claim 1 of the '026 patent as representative of the '026 patent family claims. *See Berkheimer v. HP Inc.*, 881 F.3d 1360, 1365 (Fed. Cir. 2018). Claim 1 recites:

1. An Internet-connected digital device for receiving, via the Internet, video content to be viewed by a subscriber of a video-on-demand system using a hierarchically arranged electronic program guide,

the Internet-connected digital device being configured to obtain and present to the subscriber an electronic program guide as a templated video-on-demand display, which uses at least one of a plurality of different display templates to which the Internet-connected digital device has access, to enable a subscriber using the Internet-connected digital device to navigate in a drill-down manner through titles by category information in order to locate a particular one of the titles whose associated video content is desired for viewing on the Internet-connected digital device using the same category information as was designated by a video content provider in metadata associated with the video content;

wherein the templated video-on-demand display has been generated in a plurality of layers, comprising: (a) a first layer comprising a background screen to provide at least one of a basic color, logo,

or graphical theme to display; (b) a second layer comprising a particular display template from the plurality of different display templates layered on the background screen, wherein the particular display template comprises one or more reserved areas that are reserved for displaying content provided by a different layer of the plurality of layers; and (c) a third layer comprising reserved area content generated using the received video content, the associated metadata, and the associated plurality of images to be displayed in the one or more reserved areas in the particular display template as at least one of text, an image, a navigation link, and a button,

wherein the navigating through titles in a drilldown manner comprises navigating from a first level of the hierarchical structure of the video-on-demand content menu to a second level of the hierarchical structure to locate the particular one of the titles, and

wherein a first template of the plurality of different display templates is used as the particular display template for the templatized display for displaying the first level of the hierarchical structure and wherein a second template of the plurality of different display templates is used as the particular display template for the templatized display for displaying the second level of the hierarchical structure,

wherein the received video content was uploaded to a Web-based content management system by a content provider device associated with the video content provider via the Internet in a digital video format, along with associated metadata including title

information and category information, and along with an associated plurality of images designated by the video content provider, the associated metadata specifying a respective hierarchical location of a respective title of the video content within the electronic program guide to be displayed on the Internet-connected digital device using the respective hierarchically-arranged category information associated with the respective title,

wherein at least one of the uploaded associated plurality of images designated by the video content provider is displayed with the associated respective title in the templated video-on-demand display.

'026 patent, claim 1.

ii. '825 Patent

The '825 patent also generally relates to electronic programming guides for “video-on-demand” television systems. '825 patent, 1:58-64. The patent seeks to improve existing program guides by adjusting the order of categories of listings within a guide based on a user’s viewing history. Through these readjustments, the system reduces the number of keypresses needed for a viewer to reach their desired video program. *Id.* at Abstract.

For purposes of this appeal, the parties treat claim 1 of the '825 patent as representative of the '825 patent claims but also address dependent claim 15. *See Berkheimer*, 881 F.3d at 1365. Claim 1 recites:

1. A method for dynamic adjustment of an individualized electronic program guide where the adjustment is based at least in part on individual viewer consumption of video-on-demand programs on a subscriber TV system to enable navigating by

an individual viewer in a TV subscriber household that may have a plurality of viewers to video-on-demand programs offered on a video-on-demand platform of a digital TV services provider which is at least part of a digital TV services provider system, the method comprising:

(a) maintaining, at the digital TV services provider system, an electronic program guide database comprising electronic program guide data, and a usage history database comprising a log of selection data corresponding to the viewer's consumption of the video-on-demand programs using the video-on-demand platform;

(b) establishing, at the digital TV services provider system, viewer-individualized electronic program guide data for each of a plurality of individual viewers to enable the generation of viewer-individualized electronic program guides for each of said plurality of individual viewers at the subscriber TV system for use in accessing the video-on-demand programs, and allowing each respective individual viewer to access a display of their respective viewer-individualized electronic program guide through a Log-In step by which the respective individual viewer operating the subscriber TV system can be associated with their respective viewer-individualized electronic program guide;

(c) in one or more previous sessions while said respective individual viewer is logged onto their respective viewer-individualized electronic program guide in order to access the video-on-demand programs on the subscriber TV system, tracking, at the digital TV services provider system, said respective individual viewer's consumption of the vid-

eo-on-demand programs listed in their respective viewer-individualized electronic program guide and saving the selection data in the usage history database;

(d) determining, at the digital TV services provider system, an order of relevance of a plurality of category names for said respective individual viewer selection of video-on-demand programs from their respective viewer-individualized electronic program guide based at least in part on said respective individual viewer's selection data from said one or more previous sessions as stored in the usage history database and reflecting said respective individual viewer's preferences for selection of video-on-demand programs from their respective viewer-individualized electronic program guide, and based at least in part on the electronic program guide data in the electronic program guide database; and

(e) at the start of each new session when said respective individual viewer logs onto their respective viewer-individualized electronic program guide in order to access video-on-demand programs on the subscriber TV system, reordering a current display listing of the category names for categories of video-on-demand programs on said respective individual viewer's viewer-individualized electronic program guide based at least in part on said determined order of relevance.

'825 patent, claim 1.

Claim 15 recites:

15. The method of claim 1, further comprising automatically generating an additional category or subcategory based on the log of said respective in-

dividual viewer’s consumption of the video-on-demand programs maintained in the usage history database.

Id. at claim 15.

B. Procedural History

In October 2020, BBiTV sued Amazon.com, Inc., Amazon.com Services LLC, and Amazon Web Services, Inc. (collectively, Amazon) in the United States District Court for the Western District of Texas alleging patent infringement. BBiTV asserted claims 1, 6, and 7 of the ’026 patent; claims 1, 13, and 17 of the ’388 patent; claims 1, 7, and 8 of the ’750 patent; claims 1, 3, and 8 of the ’751 patent; and claims 1, 10, 15, and 17 of the ’825 patent. Amazon moved for summary judgment in June 2022, arguing that all of BBiTV’s asserted claims were patent ineligible under 35 U.S.C. § 101. The district court agreed, granted Amazon’s summary judgment motion, and entered judgment against BBiTV. *See Broadband iTV, Inc. v. Amazon.com, Inc.*, 2022 WL 4703425 (W.D. Tex. Sept. 30, 2022).

In conducting its § 101 analysis, the district court applied the two-step test set forth by the Supreme Court in *Alice Corp. Pty. Ltd. v. CLS Bank Intern.*, 573 U.S. 208 (2014). The district court conducted separate analyses for the ’026 patent family and the ’825 patent.

i. ’026 Patent Family

At *Alice* step one, the district court determined the claims “are directed to the abstract idea of receiving hierarchical information and organizing the display of video content.” *Broadband*, 2022 WL 4703425, at *15. The district court likened the claims to both a “computerized implementation of [a] business process” and the abstract idea of sending classification information with content or

displaying content hierarchically. *Id.* at *15-16. The district court also considered the generic nature of the claimed server and the “routine and conventional practice” of using the claimed templates. *Id.* at *16. The district court concluded that neither feature “transform[ed]” or “save[d] the claims under *Alice*.” *Id.*

At *Alice* step two, the district court determined nothing transforms the claims into something other than the abstract idea itself. *Id.* at *17-18. The district court determined there is no genuine dispute of material fact that the claims “recite only generic and conventional components, arranged in a conventional manner, and provide only conventional functionalities.” *Id.* at *17. After considering BBiTV fact and expert testimony, along with the ’026 and ’825 patents’ specifications, the district court found no genuine dispute of material fact as to whether the claimed server or hierarchical organization was conventional. *Id.* The district court also determined that the claimed hierarchical navigation and the use of templates are fundamental human practices that form the abstract idea itself. *Id.*

ii. ’825 Patent

At *Alice* step one, the district court determined the claims “are directed to the abstract idea of collecting and using a viewer’s video history to suggest categories of video content.” *Id.* at *11. The district court reasoned that “clerks at video rental stores” have done what the ’825 patent claims for years. *Id.* The district court determined that the claims are not meaningfully different from other claims that this court has found abstract, including claims directed to collecting user information and providing content based on that information. *Id.* at *11-12 (collecting cases).

At *Alice* step two, the district court determined nothing transforms the claims into something other than the abstract idea itself. *Id.* at *13-15. The district court reasoned that the '825 patent itself “admits that tracking systems that could collect the users’ viewing history were ‘conventional.’” *Id.* at *13 (citing '825 patent, 7:28-38). Further, the district court explained, there is no genuine dispute of material fact that the claims recite conventional databases, servers, and televisions, combined with a generic method of identifying a user. *Id.* at *13-14.

The district court determined that all asserted claims were patent ineligible under § 101. BBiTV appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

II. STANDARD OF REVIEW

We review a district court’s grant of summary judgment under the law of the regional circuit, here the Fifth Circuit. *See Core Wireless Licensing S.A.R.L. v. LG El-ecs., Inc.*, 880 F.3d 1356, 1361 (Fed. Cir. 2018). The Fifth Circuit reviews summary judgment de novo. *Id.* Summary judgment is proper when, viewing all evidence in the light most favorable to the nonmovant, there is no genuine dispute of material fact and the moving party is entitled to judgment as a matter of law. *Triple Tee Golf, Inc. v. Nike, Inc.*, 485 F.3d 253, 261 (5th Cir. 2007).

We review decisions of § 101 patent eligibility de novo. *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1342 (Fed. Cir. 2018). Patent eligibility is a question of law that may be based on underlying factual findings. *Berkheimer*, 881 F.3d at 1365. Section 101 patent eligibility may be resolved on summary judgment so long as there is not a genuine dispute of material fact. *BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018).

III. DISCUSSION

Section 101 of the Patent Act provides that: “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. §101. The Supreme Court has found that §101 “contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice*, 573 U.S. at 216 (citation omitted). The Supreme Court has articulated a two-step test, commonly referred to as the “*Alice*” test, to determine whether a patent claims patent-ineligible subject matter. *Id.* at 217-18. At *Alice* step one, we determine whether a claim is directed to a patent-ineligible concept, here an abstract idea. *Id.* at 217. If not, the inquiry ends. But if the claims are directed to an abstract idea, we must proceed to step two. At *Alice* step two, we review whether the claim recites elements sufficient to transform it into a patent-eligible application of the abstract idea. *Id.* at 217-18.

A. '026 Patent Family

i. Alice Step One

The district court determined the claims of the '026 patent family “are directed to the abstract idea of receiving hierarchical information and organizing the display of video content.” *Broadband*, 2022 WL 4703425, at *15. BBiTV argues that the '026 patent family claims are directed to patentable improvements to computer user interfaces, and that the district court erred by dismissing claim elements it found to be generic at *Alice* step one rather than step two. We disagree with BBiTV.

At *Alice* step one, we must determine whether the claims at issue are directed to patent-ineligible subject

matter, here, an abstract idea. The “directed to” inquiry requires that we look to the character of the claims as a whole. *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016). In addition to the claim language itself, we may also examine the patent’s specification to determine the meaning of the claims as a whole. *Yu v. Apple Inc.*, 1 F.4th 1040, 1043 (Fed. Cir. 2021) (citation omitted). The step one inquiry often turns to the question of what the patent asserts as the claimed advance over the prior art. *Id.*

Whether a claim is directed to a longstanding or fundamental human practice can inform whether a claim is abstract. *CardioNet, LLC v. InfoBionic, Inc.*, 955 F.3d 1358, 1372-73 (Fed. Cir. 2020); *Intell. Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1314 (Fed. Cir. 2016). Additionally, whether a patent’s claims can be performed in the human mind or using a pencil and paper can inform whether a claim is abstract. *PersonalWeb Techs. LLC v. Google LLC*, 8 F.4th 1310, 1316 (Fed. Cir. 2021). But the *Alice* inquiry is not a prior art search. *See CardioNet*, 955 F.3d at 1373. And it is not enough to “merely trace the invention to some real-world analogy.” *Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999, 1011 (Fed. Cir. 2018).

The claims of the ’026 patent family are directed to receiving metadata and organizing the display of video content based on that metadata. Representative claim 1 of the ’026 patent recites an “electronic program guide” that is automatically created using “metadata” that was “uploaded to a [server] by a content provider.” ’026 patent, claim 1. Specifically, the claimed metadata determines the “respective hierarchical location of a respective title of the video content within the electronic program guide to be displayed.” *Id.*

The specification further confirms our understanding of what the claims are directed to. According to the '026 patent, an increase in content offerings created the need to “enable home TV viewers to find something of interest for viewing among the vast numbers of new programs.” *Id.* at 2:66-3:12. In response, the '026 patent’s claimed advance is using a computer to generate a programming guide that automatically “list[s] the title of the video content in an electronic program guide” according to metadata uploaded by a content provider. *Id.* at 3:16-37.

The district court correctly determined that receiving metadata and organizing the display of video content based on that metadata is abstract. The '026 patent family claims are substantively similar to claims this court has previously found directed to abstract ideas. In *Electric Power Group*, we found patent ineligible certain claims for “monitoring of an electric power grid by collecting data from multiple data sources, analyzing the data, and displaying the results.” *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1351 (Fed. Cir. 2016). In *TLI*, we found patent ineligible claims for “classifying and storing digital images in an organized manner” based on “classification data, such as a date or timestamp.” *In re TLI Commc’ns LLC Pat. Litig.*, 823 F.3d 607, 609-610 (Fed. Cir. 2016). Here, the '026 patent family claims are directed to receiving and displaying information like *Electric Power Group* and organizing information based on classification information like *TLI*. As we have previously recognized, the combination of two abstract ideas does not render an abstract idea less abstract. *See RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017).

BBitV’s first argument relies heavily on *Core Wireless* and *Data Engine*. In *Core Wireless*, we held that

claims directed to a “particular manner of summarizing and presenting information in electronic devices” were not abstract. 880 F.3d at 1362. We explained that the claims at issue there were directed to the features of an improved user interface, including the size and location of the user interface. *Id.* at 1362-63. In *Data Engine*, we held that claims directed to a “specific method for navigating through three-dimensional electronic spreadsheets” were not abstract. 906 F.3d at 1007-08. There, the patent’s specification identified the shortcomings and technological challenges in computer spreadsheets, and the claims provided a specific solution to the “known technological problem.” *Id.*

Unlike the claims in *Core Wireless* or *Data Engine*, the ’026 patent family claims are not directed to an improved structure or function of a user interface. It is true that the claims are directed to a program guide, which is a type of user interface. But the fact that the claims involve a user interface does not automatically put the claims in the same category as *Core Wireless* and *Data Engine*. Instead, *Core Wireless* and *Data Engine* require an improved structure or function that is missing here. 880 F.3d at 1362-63; 906 F.3d at 1007-09. Put another way, *Core Wireless* and *Data Engine* require a specific, technological solution to a technological problem. Here, the claims do not recite an improved structure or function within a user guide, but rather, are directed to arranging content in a particular order. Reordering content within a user guide is not a sufficient technological solution to a technological problem, but rather a results-oriented abstract idea. *See Elec. PowerGrp., LLC*, 830 F.3d at 1355.

BBiTV argues that the claimed templates provide specific structure similar to *Core Wireless* and *Data Engine*.

We disagree. While claim 1 does recite a “templated” video-on-demand display that consists of three layers, the use of templates to create the electronic programming guide is not the claimed advance. Instead, as previously discussed, the claims are directed to receiving metadata and organizing the display of video content based on that metadata. The claimed templates themselves do not provide a technological solution or improve any computer-related function. See *Int’l Bus. Machs. Corp. v. Zillow Grp., Inc.*, 50 F.4th 1371, 1381-82 (Fed. Cir. 2022).

BBitV’s second argument is that the district court performed an *Alice* step two inquiry within *Alice* step one. We discern no error in the district court’s analysis.

We have observed that steps one and two are “plainly related” and patent eligibility may “involve overlapping scrutiny of the content of the claims.” *Elec. Power Grp., LLC*, 830 F.3d at 1353. This is not to say that the steps may be conflated or that a particular step may be disregarded. The step one analysis does not require that we “exclude the possibility that any particular inventive means are to be found somewhere in the claims.” *Id.* But we have recognized that it may be necessary to analyze conventionality at step one as well as step two, such as to determine whether a claim is directed to a longstanding or fundamental human practice or to determine what the patent asserts is the claimed advance over the prior art. See *CareDx, Inc. v. Natera, Inc.*, 40 F.4th 1371, 1379 (Fed. Cir. 2022); see also *Bozeman Fin. LLC v. Fed. Rsv. Bank of Atlanta*, 955 F.3d 971, 978 (Fed. Cir. 2020). When it comes to analyzing conventionality, there is no “bright line between the two steps.” *CareDx*, 40 F.4th at 1379. Yet we must take care to avoid allowing a conventionality analysis at step one to render step two superfluous (except where the claimed innova-

tion at step two is nothing more than practice of the abstract idea of step one). To find otherwise would ignore the Supreme Court’s guidance in *Alice*, which clearly set forth a two-step inquiry. *Alice*, 573 U.S. at 217-18.

Here, the district court determined at step one that the claimed “[w]eb-based content management system ... is a generic server.” *Broadband*, 2022 WL 4703425, at *16. Then, still at step one, the district court considered the claimed “templates,” and determined they merely provided “a generic environment” and their use is “a routine and conventional practice.” *Id.* We agree that the claimed server and templates do not change the fact that the claims are directed to an abstract idea. The claimed server and templates do not change the outcome at step one because the claims are not directed to an improved server or provide a technological solution to template technology. Put another way, analyzing the conventionality of the claimed content management system and templates at step one is proper for the purpose of determining what the claims are directed to. We determine the claims of the ’026 patent family are directed to an abstract idea.

ii. Alice Step Two

The district court determined nothing transforms the claims into something other than the abstract idea because there is no genuine dispute of material fact that the claims “recite only generic and conventional components, arranged in a conventional manner, and provide only conventional functionalities.” *Broadband*, 2022 WL 4703425, at *17. BBiTV points to three aspects of the claims that it believes transform the claims to more than the abstract idea: first, the idea of generating displays “automatically from specific template types” based on data that content providers upload to a database; second,

the content management system which is a type of server; and third, the claimed templates. Appellant Br. 50-53. We agree with the district court that none of these elements transform the claims at step two into something other than the abstract idea itself.

At *Alice* step two, we must determine whether the claims include “an element or combination of elements” that transforms the claims into something “significantly more” than a claim on the patent-ineligible concept itself. *Alice*, 573 U.S. at 217-18 (citation omitted). The patent-ineligible concept itself cannot transform the invention into something significantly more than that concept. *BSG Tech LLC*, 899 F.3d at 1290. Similarly, claim elements or combinations of claim elements that are routine, conventional or well-understood cannot transform the claims. *Id.* at 1290-91. When the patent’s specification “describes the components and features listed in the claims generically,” it “support[s] the conclusion that these components and features are conventional.” *Weisner v. Google LLC*, 51 F.4th 1073, 1083-84 (Fed. Cir. 2022); see also *Beteiro, LLC v. DraftKings Inc.*, 104 F.4th 1350, 1357-58 (Fed. Cir. 2024).

The district court correctly determined that the ’026 patent family claims do not include something “significantly more” than the abstract idea itself. The district court examined the intrinsic record and BBiTV’s fact and expert testimony regarding the nature of certain features of the claims and found no genuine dispute of material fact that precluded summary judgment. *Broadband*, 2022 WL 4703425, at *17-18. We agree with the district court.

BBiTV argues that the idea of generating displays “automatically from specific template types” based on data that content providers upload to a database trans-

forms the '026 patent family into more than the abstract idea. We are not persuaded. Automation of an abstract idea does not constitute an inventive concept. *See OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363; *see also Alice*, 573 U.S. at 221-24. Further, this argument is nothing more than the abstract idea itself. *See BSG Tech LLC*, 899 F.3d at 1290. Receiving and displaying information is the abstract idea we identified at step one. Those elements, therefore, cannot transform that idea into significantly more.

BBiTV next argues that the content management system transforms the '026 patent family into more than the abstract idea. This argument fares no better than the last. The district court concluded that the content management system is a conventional server. *Broadband*, 2022 WL 4703425, at *17. Notably, the '026 patent's specification does not claim to improve server technology, but instead discloses using conventional server capabilities such as “manag[ing] a [d]atabase,” and “retrieving” and “transmitt[ing]” content.’ 026 patent, 3:44-53, 5:24-29, 6:4-9. The district court also considered inventor testimony that the server used to implement the claimed content management system was available “off the market.” *Broadband*, 2022 WL 4703425, at *17 (citation omitted). We agree with the district court that no genuine dispute of material fact precludes summary judgment.

BBiTV's third argument is that the claimed templates transform the claims to more than the abstract idea. We are not persuaded. The district court found no genuine dispute of material fact (albeit, at step one), that the claimed templates are generic, routine and well-understood in the art. The '026 patent's specification does not purport to improve templates, but instead dis-

closes using known templates, such as those created by a “template design firm,” to automate content-creation. ’026 patent, 7:44-49. In reaching its conclusion, the district court also considered BBiTV’s infringement expert’s admission that templates “were a known entity” at the time of the invention. *Broadband*, 2022 WL 4703425, at *10. We agree with the district court’s conclusion. When properly analyzed at step two, we reach the same conclusion as the district court and determine that the claimed templates do not transform the claims to more than the abstract idea.

Because we determine the claims of the ’026 patent family do not include “significantly more” than the abstract idea itself, we find that the claims are patent ineligible under § 101.

B. ’825 Patent

i. Alice Step One

The district court determined the claims of the ’825 patent “are directed to the abstract idea of collecting and using a viewer’s video history to suggest categories of video content.” *Id.* at *11. BBiTV argues that the ’825 patent claims are directed to patentable improvements to computer user interfaces, again relying on *Data Engine* and *Core Wireless*. We disagree with BBiTV.

Representative claim 1 of the ’825 patent is directed to the abstract idea of collecting and using viewing history data to recommend categories of video content. Claim 1 recites “maintaining . . . a usage history database,” using a “Log-In step” to track an “individual viewer’s consumption,” and “generat[ing] . . . viewer-individualized electronic program guides.” ’825 patent, claim 1. Claim 1 does not disclose how to maintain a usage history database, track viewer consumption, or generate a program

guide. Instead, the claims recite functions in the abstract.

The '825 patent's specification confirms that the claims are directed to an abstract idea. The specification discloses claim 1 as "(a) maintaining a list of category names . . . (b) tracking a viewer's past history . . . [and] (c) reordering a current display listing of the category names based on [viewer history]." *Id.* at 3:1-9.

Put another way, claim 1 is directed to a type of "targeted advertising," which we have repeatedly found abstract. *See, e.g., Free Stream Media Corp. v. Alphonso Inc.*, 996 F.3d 1355, 1361-62 (Fed. Cir. 2021); *Intell. Ventures I LLC v. Cap. One Bank (USA)*, 792 F.3d 1363, 1369 (Fed. Cir. 2015); *Customedia Techs., LLC v. Dish Network Corp.*, 951 F.3d 1359, 1363 (Fed. Cir. 2020). Many of our targeted advertising cases have noted, as the district court did here, that patent claims on targeted advertising are abstract. *See Intell. Ventures I LLC*, 792 F.3d at 1369 (tailoring information, as in targeted advertising, is a "fundamental . . . practice long prevalent in our system" (citation omitted)). Further, determining content to recommend based on user consumption history can be performed in the human mind or using a pencil and paper. This is another indication that the claims are abstract. *See PersonalWeb Techs.*, 8 F.4th at 1316; *see also Beteiro*, 104 F.4th at 1356. Indeed, the patent claims differ little from a check-out system at a public library. Consistent with our "targeted advertising" precedent, we conclude that the claims of the '825 patent are directed to an abstract idea.

The stated goal of the '825 patent, to reduce the number of "keypresses needed for a viewer to navigate to a title of interest," does not compel a different result. '825 patent, Abstract. The reduction in keypresses is

achieved through the recited targeted advertising method. And that method is abstract. As we have previously observed, a claim that results in increased speed or efficiency may still be directed to an abstract idea, as is the case here. *See Intell. Ventures I LLC*, 792 F.3d at 1366-67.

BBitV argues that the claims of the '825 patent are directed to an improved structure or function of a user interface as in *Core Wireless* and *Data Engine*. We disagree. While claim 1 does involve a user interface, merely identifying a user interface does not invoke *Core Wireless* and *Data Engine*. The '825 patent claims are directed to reordering content within a user guide based on viewing history, which does not rise to a technological solution to a technological problem. Similar to the '025 patent family claims, the '825 patent claims do not claim a technological solution to a technological problem.

Because we determine the claims of the '825 patent are directed to an abstract idea, we proceed to *Alice* step two.

ii. Alice Step Two

The district court determined nothing transforms the claims into something other than the abstract idea itself. *Broadband*, 2022 WL 4703425, at *13-15. BBitV argues that the claims include three elements that transform the claims into something significantly more than the abstract idea itself: generating displays where categories are arranged based on relevance; identifying a viewer using a login step; and creating new categories to encompass highly relevant content. BBitV's third argument relies exclusively on claim 15, as only claim 15 requires "generating an additional category" of programs based on viewing history. '825 patent, claim 15. We are not persuaded.

The district court correctly determined that the '825 patent claims are not transformed into something “significantly more” than the abstract idea itself. As with the '026 patent family, the district court thoroughly examined the intrinsic record, including both the claims and the specification of the '825 patent. *Broadband*, 2022 WL 4703425, at *13-15. The district court largely based its step two analysis on the intrinsic record, and we again agree with the district court’s interpretation of the intrinsic record.

BBitV argues that generating displays where categories are arranged based on relevance transforms the claims. As with its argument at *Alice* step two for the '026 patent family, BBitV fails to show transformative elements that recite something more than the abstract idea itself. *See BSG Tech LLC*, 899 F.3d at 1290. Generating displays that are arranged based on relevance is a restatement of the abstract idea of collecting and using viewing history data to recommend categories of content. Even if the recommended categories are “new,” as only claim 15 requires, that requirement is a feature of the abstract idea of recommending categories and does not sufficiently transform the claims. Further, the idea of creating categories is a longstanding human practice that does not transform the claims, especially given that claim 15 does not include any requirements for *how* the desired result is achieved. *See Intell. Ventures I LLC*, 838 F.3d at 1315; *Elec. Power Grp., LLC*, 830 F.3d at 1355.

The log-in step also fails to transform the claims. The district court correctly determined that there is no genuine dispute of material fact that the log-in step is anything other than well-understood, routine, and conventional. The patent does not claim any specific method of logging in, but rather, requires that each viewer can ac-

cess their individualized program guide “through a Log-In step.” ’825 patent, claim 1. The patent’s specification similarly does not claim to improve log-in technology or provide an innovative method of logging in, but instead merely discusses logging in as a way to identify a user and carry out the abstract idea of providing a targeted program guide. *Id.* at 3:28-35. Adding a generic log-in step to achieve the abstract idea of recommending content based on a user’s viewing history does not sufficiently transform the abstract idea.

Because we determine the claims of the ’825 patent do not include “significantly more” than the abstract idea itself, we find that the claims are patent ineligible under § 101.

IV. CONCLUSION

We have considered BBitV’s other arguments and find them unpersuasive. For the above reasons, we hold that the asserted claims are directed to patent-ineligible subject matter and are not sufficiently transformed into something other than the abstract idea itself and therefore are rendered as non-patent eligible subject matter. We thus affirm the district court’s grant of summary judgment based on subject matter ineligibility under § 101.

AFFIRMED

COSTS

Costs to Amazon.

APPENDIX B
UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

CASE No. 6:20-cv-00921-ADA

BROADBAND iTV, INC.,
Plaintiff,

v.

AMAZON.COM, INC., AMAZON.COM SERVICES LLC AND
AMAZON WEB SERVICES, INC.,
Defendants,

MEMORANDUM OPINION AND ORDER

Before the Court is the Motion for Summary Judgment of Invalidity under 35 U.S.C. § 101 (the “Motion”) filed by Amzon.com, Inc.; Amazon.com Services LLC; and Amazon Web Services, Inc. (collectively, “Defendants”). ECF No. 111. The Court heard the parties’ arguments during the final pretrial conference held on August 30, 2022, took the motion under advisement, and canceled the jury trial. ECF Nos. 196, 197, 200. After considering supplemental briefing (ECF Nos. 202, 203), Court GRANTS Defendants’ Motion for the reasons set forth below.

I. LEGAL STANDARD

A. Motion for Summary Judgment

“Summary judgment must be granted when, drawing all reasonable inferences in favor of the non-movant, there is no genuine issue as to any material fact.”

Billups-Rothenberg, Inc. v. Associated Reg'l & Univ. Pathologists, Inc., 642 F.3d 1031, 1036 (Fed. Cir. 2011); Fed. R. Civ. P. 56(a). “Under 35 U.S.C. § 282, a patent is presumed valid and one challenging its validity bears the burden of proving invalidity by clear and convincing evidence.” *Innovative Scuba Concepts, Inc. v. Feder Indus., Inc.*, 26 F.3d 1112, 1115 (Fed. Cir. 1994). When “‘clear and convincing’ evidence requirement applies, the trial judge’s summary judgment inquiry as to whether a genuine issue exists will be whether the evidence presented is such that a jury applying that evidentiary standard could reasonably find for either the plaintiff or the defendant.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255, 106 S. Ct. 2505, 2514, 91 L. Ed. 2d 202 (1986); *see also Eli Lilly & Co. v. Barr Lab’ys, Inc.*, 251 F.3d 955, 962 (Fed. Cir. 2001) (“[A] moving party seeking to invalidate a patent at summary judgment must submit such clear and convincing evidence of invalidity so that no reasonable jury could find otherwise.”). In determining whether a genuine issue of material fact exists, the court views the evidence in the light most favorable to the nonmoving party and resolves all doubts in its favor. *Eli Lilly & Co.*, 251 F.3d at 962.

B. Patent Eligibility Under 35 U.S.C. § 101

Section 101 of the Patent Act defines the subject matter eligible for patent protection: “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” 35 U.S.C. § 101. However, courts have long recognized that laws of nature, natural phenomena, and abstract ideas are not patentable under § 101 because they are “the basic tools of scientific and technological work.” *Alice Corp. Pty. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014) (citations omitted).

In *Alice*, the Supreme Court articulated a two-step framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts. *Id.* at 217. In *Alice* step one, the court must “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* In doing so, the court must be careful not to over generalize the invention because “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Id.* (quoting *Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc.*, 566 U.S. 66, 71 (2012)). Instead, “the claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter.” *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1312 (Fed. Cir. 2016) (citation omitted). If the claims are not directed to one of those patent-ineligible concepts, the inquiry ends. If the claims are directed to one of those patent-ineligible concepts, then the inquiry proceeds to step two of the *Alice* framework.

In *Alice* step two, the court considers whether the claims contain an “inventive concept” sufficient to “transform the nature of the claim into a patent-eligible application.” *Alice*, 573 U.S. at 217-18 (quotation omitted). In doing so, the court considers “the elements of each claim both individually and ‘as an ordered combination’” to determine whether they are “sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.” *Id.* (quoting *Mayo*, 566 U.S. at 72-73). *Alice* step two is satisfied when the claim limitations “involve more than performance of ‘well-understood, routine, [and] conventional activities previously known to the industry.’” *Berkheimer v. HP*

Inc., 881 F.3d 1360, 1367 (Fed. Cir. 2018) (quoting *Alice*, 573 U.S. at 225 and *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1347-48 (Fed. Cir. 2014)). However, to recite an inventive concept, a patent must do more than recite an abstract idea “while adding the words ‘apply it.’” *Alice*, 573 U.S. at 221 (quoting *Mayo*, 566 U.S. at 72). “[S]imply appending conventional steps, specified at a high level of generality, to laws of nature, natural phenomena, and abstract ideas cannot make those laws, phenomena, and ideas patentable.” *Mayo*, 566 U.S. at 82. Likewise, “the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.” *Alice*, 573 U.S. at 223.

“While the ultimate determination of eligibility under § 101 is a question of law, like many legal questions, there can be subsidiary fact questions which must be resolved en route to the ultimate legal determination.” *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1128 (Fed. Cir. 2018). As such, “[t]he question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact” that must be “proven by clear and convincing evidence.” *Berkheimer*, 881 F.3d at 1368. Additionally, specific improvements described in a patent specification, “to the extent they are captured in the claims, [may] create a factual dispute regarding whether the invention describes well-understood, routine, and conventional activities.” *Id.* at 1369. However, “[w]hen there is no genuine issue of material fact regarding whether the claim element or claimed combination is well-understood, routine, conventional to a skilled artisan in the relevant field, [pa-

tent eligibility] can be decided on summary judgment as a matter of law.” *Id.* at 1368.

C. Collateral Estoppel

The doctrine of collateral estoppel precludes relitigation of an issue if “(1) the identical issue was previously adjudicated; (2) the issue was actually litigated; and (3) the previous determination was necessary to the decision.” *Bradberry v. Jefferson Cnty., Tex.*, 732 F.3d 540, 548 (5th Cir. 2013) (citation omitted). “[T]he issue of whether to apply collateral estoppel is a question of law” *Soverain Software*, 778 F.3d at 1314 (quoting *Bradberry*, 732 F.3d at 549).

In the patent context, “where a patent has been declared invalid in a proceeding in which the ‘patentee has had a full and fair chance to litigate the validity of his patent’, the patentee is collaterally estopped from relitigating the validity of the patent.” *Miss. Chem. Corp. v. Swift Agric. Chems. Corp.*, 717 F.2d 1374, 1376 (Fed. Cir. 1983) (internal citation omitted).

Collateral estoppel applies to the issue of patent eligibility. *See, e.g., NetSoc, LLC v. Oath Inc.*, No. 18-CV-12267 (RA), 2020 WL 419469, at *5-9 (S.D.N.Y. Jan. 24, 2020). “[W]here different patents are asserted in a first and second suit, a judgment in the first suit will trigger claim preclusion only if the scope of the asserted patent claims in the two suits is essentially the same.” *VideoShare, LLC v. Google LLC*, No. 6:19-cv-663-ADA, 2020 WL 6365543, at *4 (W.D. Tex. May 4, 2020) (quoting *SimpleAir, Inc. v. Google LLC*, 884 F.3d 1160, 1167 (Fed. Cir. 2018)).

“Complete identity of claims is not required to satisfy the identity-of-issues requirement [of collateral estoppel].” *Soverain Software LLC v. Victoria’s Secret Direct*

Brand Mgmt., LLC, 778 F.3d 1311, 1319 (Fed. Cir. 2015). Instead, “[i]f the differences between the unadjudicated patent claims and adjudicated patent claims do not materially alter the question of invalidity, collateral estoppel applies.” *Ohio Willow Wood Co. v. Alps S., LLC*, 735 F.3d 1333, 1342 (Fed. Cir. 2013).

II. UNDISPUTED FACTS

The Court finds that there is no genuine dispute as to the following material facts. These facts come from either the undisputed record or from the nonmovant’s own witnesses and arguments.

A. Background Facts

Plaintiff Broadband iTV, Inc. (“BBitV”) alleges infringement of U.S. Patent Nos. 9,973,825 (the “’825 patent”), 9,648,388 (the “’388 patent”), 10,536,750 (the “’750 patent”), 10,536,751 (the “’751 patent”), 10,028,026 (the “’026 patent”). Specifically, BBitV alleges that Amazon infringes claims 1, 10, 15 and 17 of the ’825 patent, claims 1, 13 and 17 of the ’388 patent, claims 1, 7 and 8 of the ’750 patent, claims 1, 3 and 8 of the ’751 patent, and claims 1, 6 and 7 of the ’026 patent. ECF No. 175 at 6-7.

B. The ’825 Patent

The ’825 patent is titled “Dynamic Adjustment of Electronic Program Guide Displays Based on Viewer Preferences for Minimizing Navigation in VOD Program Selection,” and lists Milton Diaz Perez as the sole inventor. ECF No. 113-1 (’825 patent) at Cover. The ’825 patent concerns adjusting the order of categories in a list of video-on-demand (“VOD”) programs based on what a user has watched previously. *Id.*, Abstract, cl. 1. The ’825 patent discloses a “MyEPG” menu that, upon user login, shows an individualized list of VOD categories. *Id.* at 19:41-20:8. This category list may be ordered based on

individual users' "actual viewing habits," *i.e.*, a log of "the viewer's consumption of programming content." *Id.* at 20:58-67.

The inventor Mr. Diaz testified that he did not invent "hierarchical categories and subcategories." ECF No. 152-2 (Diaz July 30, 2015 Tr.) at 774:15-18. For collecting the users' viewing data, the '825 patent discloses "a Tracking System 15 of conventional type" that could collect "viewer navigation data." '825 patent at 7:28-38. Such viewing data are exported to a third party "non-biased or unrelated firm" to create user profiles using "profile analysis methods" that the specification does not describe in any detail or specify in any other way. *Id.* at 7:38-41.

According to the '825 patent, the user's viewing data is stored in a "Usage History database 703." *Id.* at 20:58-67. The specification does not disclose any particular structure for the database or otherwise provide any details about it. *See id.*

In the '825 patent, a "MyEPG Server 702" determines the order of the categories based on the stored viewing data. *Id.* The specification does not disclose any particular structure for the MyEPG server. *See id.*

The '825 patent states that ordering the categories is based on "relevance schema" or "viewer preference algorithms," but the specification does not describe any particular "schema" or "algorithm" or provide any details about them. *Id.* at 20:65, 22:28.

Claim 1 of the '825 patent is reproduced below:

1. A method for dynamic adjustment of an individualized electronic program guide where the adjustment is based at least in part on individual viewer consumption of video-on-demand programs

on a subscriber TV system to enable navigating by an individual viewer in a TV subscriber household that may have a plurality of viewers to video-on-demand programs offered on a video-on-demand platform of a digital TV services provider which is at least part of a digital TV services provider system, the method comprising:

(a) maintaining, at the digital TV services provider system, an electronic program guide database comprising electronic program guide data, and a usage history database comprising a log of selection data corresponding to the viewer's consumption of the video-on-demand programs using the video-on-demand platform;

(b) establishing, at the digital TV services provider system, viewer-individualized electronic program guide data for each of a plurality of individual viewers to enable the generation of viewer-individualized electronic program guides for each of said plurality of individual viewers at the subscriber TV system for use in accessing the video-on-demand programs, and allowing each respective individual viewer to access a display of their respective viewer-individualized electronic program guide through a Log-In step by which the respective individual viewer operating the subscriber TV system can be associated with their respective viewer-individualized electronic program guide;

(c) in one or more previous sessions while said respective individual viewer is logged onto their respective viewer-individualized electronic program guide in order to access the video-on-demand programs on the subscriber TV system, tracking, at the digital TV services provider system, said re-

spective individual viewer's consumption of the video-on-demand programs listed in their respective viewer-individualized electronic program guide and saving the selection data in the usage history database;

(d) determining, at the digital TV services provider system, an order of relevance of a plurality of category names for said respective individual viewer selection of video-on-demand programs from their respective viewer-individualized electronic program guide based at least in part on said respective individual viewer's selection data from said one or more previous sessions as stored in the usage history database and reflecting said respective individual viewer's preferences for selection of video-on-demand programs from their respective viewer-individualized electronic program guide, and based at least in part on the electronic program guide data in the electronic program guide database; and

(e) at the start of each new session when said respective individual viewer logs onto their respective viewer-individualized electronic program guide in order to access video-on-demand programs on the subscriber TV system, reordering a current display listing of the category names for categories of video-on-demand programs on said respective individual viewer's viewer-individualized electronic program guide based at least in part on said determined order of relevance.

Id., cl. 1.

[SIC] said respective individual viewer's viewer-individualized electronic program guide based at least in part on said determined order of relevance.

C. A Court Previously Invalidated Related U.S. Patent No. 7,631,336 (the “’336 Patent”) Under § 101

U.S. Patent No. 7,631,336 (the “’336 patent”) is titled “Method for Converting, Navigating, and Displaying Video Content Uploaded from the Internet to a Digital TV Video-on-Demand Platform.” ECF No. 113-7 (’336 patent) at Cover. The ’336 patent claims priority to U.S. Appl. No. 10/909,192 filed on July 30, 2004 (’192 application). *Id.*

On April 9, 2014, BBiTV filed suit against Oceanic Time Warner Cable, LLC, among others, in the District of Hawaii, alleging infringement of the ’336 patent. *Broadband iTV, Inc. v. Oceanic Time Warner Cable, LLC*, 135 F. Supp. 3d 1175, 1178 (D. Haw. 2015) (ECF No. 113-6).

The Hawaii court held the claims of the ’336 patent ineligible under 35 U.S.C. § 101, concluding that the claims were directed to the abstract idea of “using the same hierarchical ordering based on metadata to facilitate the display and locating of video content” and recited only generic components to implement that idea. *Id.* at 1183, 1186, 1195.

With respect to the claim limitation of “Web-based content management system” in the ’336 patent, the Hawaii court stated: “‘data collection, recognition, and storage’ are ‘undisputedly well-known’ functions for servers. They do not impart any inventive concept.” *Id.* at 1193 (quoting *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014)). The Federal Circuit affirmed the decision of the Hawaii court under Rule 36 without an opinion. *Broadband iTV, Inc. v. Hawaiian Telecom Inc.*, 669 F. App’x. 555 (Fed. Cir. 2016).

Claim 1 of the '336 patent is reproduced below:

1. A method for automatically enabling the converting, navigating and displaying of video content from a video content provider on an open online network to a discrete digital TV service provider network which is of the type employing a closed system of pre-screened and pre-programmed video content selectable for viewing by TV service subscribers inputting keypresses on their TV remote control units to set-top boxes connected to their TV equipment, which predetermined video content is listed by title for selection from an electronic program guide for a video on-demand (VOD) platform of a the discrete digital TV service provider comprising:
 - (a) enabling the uploading of video content in a digital video format via an online network to a Web-based content management server that is connected to the VOD platform of the discrete digital TV service provider network, along with a title and a hierarchical address of hierarchically-arranged categories and subcategories as metadata for categorizing a hierarchical ordering for the title for the video content;
 - (b) converting the content uploaded to the Web-based content management server into a standard TV digital format used by the discrete digital TV service provider network and storing a "local instance" thereof at a video ID (VID) address in a video content database of the VOD platform, wherein the VID address is linked to the title for the video content;
 - (c) listing the title of the video content in an electronic program guide for the VOD

platform of the discrete digital TV service provider using the same hierarchically-arranged categories and subcategories as used in the uploaded metadata for the hierarchical address for the video content in the electronic program guide of the VOD platform;

(d) providing a TV service subscriber, having a TV-equipment-connected set-top box connected to the VOD platform of the discrete digital TV service provider network, with access to the electronic program guide for the VOD platform for navigating through the hierarchically-arranged titles of video content by categories and subcategories therein in order to find the title of the video content desired for viewing on their TV equipment; and

(e) upon the TV service subscriber selecting, via their TV remote control unit in communication with the set-top box, the title for the video content from the hierarchically-arranged categories and subcategories of the electronic program guide, and the set-top box transmitting a request for the selected title to the VOD platform, then enabling retrieval of the selected video content stored at the VID address in the video content database of the VOD platform linked thereto, and transmission of the selected video content to the TV service subscriber's set-top box for display on the TV service subscriber's TV equipment.

'336 patent, cl. 1.

D. The '388, '750, '751, and '026 Patents.

After the Hawaii court invalidated the '336 patent, BBiTV filed the applications for the '388, '750, '751, and '026 patents, each claiming priority to the '192 application

and listing Milton Diaz Perez as the sole inventor. ECF Nos. 113-1 through 113-5 at Covers.

The '026 patent shares a common specification with the '336 patent. The '388, '750 and '751 patents share a common specification, which is the same as the '026 patent specification, except it omits two embodiments: an Internet protocol television (“IPTV”) embodiment and a multiple content sources embodiment. ECF No. 113-5 ('026 patent) at 13:65-22:4.

Each specification describes that TV viewers can access video on-demand (“VOD”) content using a TV set-top box. ECF No. 113-2 ('388 patent) at 6:12-26. According to the specification, viewers can use a set-top box to access a hierarchical menu of categories and subcategories to navigate to a desired video. *Id.* at 6:38-55. The menu may be generated using “templates.” *Id.* at 3:13-50.

To prepare the collection of VOD titles made available to the viewers, the VOD service provider uses a server called “Content Management System” to receive video content from content providers. *Id.* at 9:44-51. The content provider can also supply “metadata,” information for classifying the content by title and topic. *Id.* This information ultimately determines the hierarchical structure of the menu shown on the viewers’ TV screens. *Id.* at 10:52-56.

Claim 1 of the '388 patent is reproduced below:

1. A set-top box, providing video-on-demand services and operatively connected to TV equipment of a TV service subscriber, programmed to perform the steps of:
 - (a) receiving, at the set-top box, via a closed system from a video-on-demand content delivery system

comprising one or more computers and computer-readable memory operatively connected to the one or more computers, respective video-on-demand application-readable metadata that is associated with respective video content and is usable to generate a video-on-demand content menu; wherein the respective video content was uploaded to a Web-based content management system by a respective content provider device associated with a respective video content provider via the Internet in a digital video format along with respective specified metadata including respective title information, category information, and subcategory information designated by the respective video content provider to specify a respective hierarchical location of a respective title of the respective video content within the video-on-demand content menu displayed on the TV equipment, wherein the respective video-on-demand application-readable metadata is generated according to the respective specified metadata;

(b) providing, to the TV subscriber at the set-top box, the video-on-demand content menu for navigating through titles, including the respective titles of the respective video content, in a drill-down manner by category information and subcategory information in order to locate a particular one of the titles whose associated video content is desired for viewing on the TV equipment, wherein the video-on-demand content menu lists the titles using the same hierarchical structure of respective category information and subcategory information as was designated by the respective video content provider in the respective specified metadata for the respective video content, wherein a plurality of different

video display templates are accessible to the set-top box, and wherein the video-on-demand content menu is generated using at least one of the plurality of different video display templates and based at least upon the respective specified metadata; and

(c) in response to the TV service subscriber selecting, via a control unit in communication with the set-top box, a first respective title associated with a first video content from the hierarchical structure of respective category information and subcategory information of the video-on-demand content menu using drill-down navigation, transmitting the selection to the set-top box for display on the TV equipment; and

(d) receiving, at the set-top box, the first video content for display on the TV equipment of the TV service subscriber, wherein in response to the selection the first video content was retrieved from a video server associated with the video-on-demand content delivery system.

Id., cl. 1.

Claim 1 of the '026 patent also claims a technique of “Drill Down Navigation” of an EPG (identified through underlining below):

enable[s] a subscriber using the Internet-connected digital device to navigate in a drill-down manner through titles by category information in order to locate a particular one of the titles whose associated video content is desired for viewing on the Internet-connected digital device using the same category information as was designated by a video content provider in metadata associated with the video content . . .

wherein the navigating through titles in a drill-down manner comprises navigating from a first level of the hierarchical structure of the video-on-demand content menu to a second level of the hierarchical structure to locate the particular one of the titles . . .

ECF No. 113-5 at 22:20-27, 45-49. Claim 1 of the '026 patent also covers the feature of “Templatized EPG Display” (identified through underlining below) that is used in connection with the “Drill Down Navigation” feature

the Internet-connected digital device being configured to obtain and present to the subscriber an electronic program guide as a templatized video-on-demand display, which uses at least one of a plurality of different display templates to which the Internet-connected digital device has access . . .

wherein the templatized video-on-demand display has been generated in a plurality of layers, comprising:

(a) a first layer comprising a background screen to provide at least one of a basic color, logo, or graphical theme to display;

(b) a second layer comprising a particular display template from the plurality of different display templates layered on the background screen, wherein the particular display template comprises one or more reserved areas that are reserved for displaying content provided by a different layer of the plurality of layers; and

(c) a third layer comprising reserved area content generated using the received video content, the associated metadata, and the associated plurality of images to be displayed in the one or more reserved

areas in the particular display template as at least one of text, an image, a navigation link, and a button, . . .

wherein a first template of the plurality of different display templates is used as the particular display template for the templated display for displaying the first level of the hierarchical structure and wherein a second template of the plurality of different display templates is used as the particular display template for the templated display for displaying the second level of the hierarchical structure . . .

Id. at 22:15-20, 22:15-44, 22:50-57.

The '026 patent discloses a web-based content management system (“WBCMS”) where providers could “greatly expand the content viewable on the VOD platform from studio-generated programs . . . to an infinite universe of authors and publishers connected to upload viewable content . . . via the Internet.” *Id.* at 18:27-31.

An example of Drill Down Navigation is discussed and explained in the specification of the '026 patent: “Through the Gateway, the VOD Application leaves the Menu mode and enters the Drill Down Navigation mode for successively displays of hierarchically-ordered video content which allow the viewer to navigate to progressively more focused content.” *Id.* at 6:34-38. FIG. 1B of the '026 patent illustrates an example of Drill Down Navigation in the context of advertisements for cars, and col. 3:58-61 describes how the hierarchical levels of the Drill Down Navigation paths (e.g., Make, Model, Dealer, etc.) correspond to categories provided by content producers in metadata. *Id.* at Fig. 1B, 3:58-61.

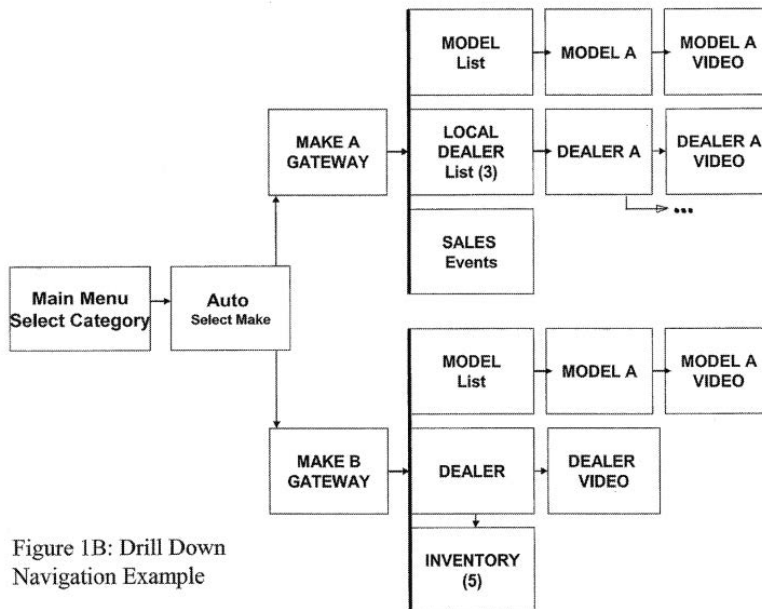


Figure 1B: Drill Down Navigation Example

The '026 patent at col. 7:18-30 describes an embodiment using the Templated EPG Display having distinct layers, which is also shown in FIG. 1C:

In FIG. 1C, an example illustrates how a templated VOD display is generated in layers. A Background screen provides a basic color, logo, or graphical theme to the display. A selected Template (display frame) appropriate to the navigation level the intended display resides on is layered on the Background. The Template typically has a frame in which defined areas are reserved for text, display image(s), and navigation links (buttons). Finally, the desired content constituted by associated Text, Image & Buttons is retrieved from the database and layered on the Template. The resulting screen display shows the combined background logo or theme, navigation frame, and text, video images, and buttons.

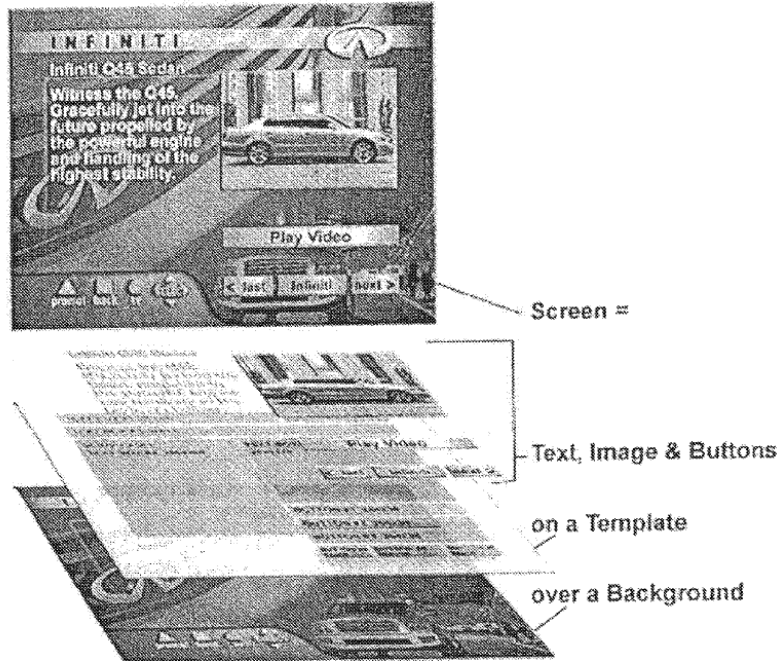


Figure 1C: Template Layer Model

Id. at 7:18-30, FIG. 1C. The '026 patent at col. 6:9-20 describes how the Templated EPG Display may be used at one or more levels of the Drill Down hierarchy of the EPG:

In the invention, the templates are of different types ordered in a hierarchy, and display of content in a template of a higher order includes links the viewer can select to content of a lower order in the hierarchy. Upon selecting a link using the remote control, the VOD Application Server 10 retrieves the template and video content of lower order and displays it to the viewer. Each successive templated display may have further links to succes-

sively lower levels of content in the hierarchy, such that the viewer can use the series of linked templated VOD displays as a “drill down navigation” method to find specific end content of interest.

Id. at 6:9-20.

The '750 and '751 patents claims are directed towards a video-on-demand application server system that works in tandem with the WBCMS in which content providers can designate titles, category, and subcategory information to influence how content is presented in an EPG. Claim 1 of both the '750 and '751 patents recite the Templated EPG Display feature in addition to the WBCMS. Claim 1 of the '751 patent further requires the “Time Availability Metadata” to be provided to the WBCMS to allow the content providers to exert additional control over when their VOD content is to be made available. ECF No. 202 at 12.

Claim 1 of the '388 patent concerns a set-top box operating downstream from a WBCMS, and like the '026, '750, and '751 claims, allows content providers to designate titles, category, and subcategory information to influence how content is presented in an EPG. Claim 1 of the '388 patent recites the Drill Down Navigation and Templated EPG Displays features and the WBCMS. ECF No. 202 at 13.

E. Admissions

Video-on-demand (“VOD”) is an area of technology that allows a user or subscriber to access TV programming at any time, instead of on a schedule like traditional linear, broadcast TV programs.

The “Background” section in the patents describes the state of technology as of the July 2004 and June 2007—the priority dates for the Asserted Patents. VOD was a

“recent type of interactive television service offered on digital TV systems . . . wherein a viewer can navigate through a program guide via the remote control unit and send a request via the set-top box for a desired video program to be addressed from the head-end to the subscriber’s set-top box for display on the TV.” ECF No. 113-2 at 1:58-64.

Although “recent,” the Background explains that “Cable television (CATV) systems” were already used for “a vast majority of TV-viewing homes in the U.S,” and “‘video-on-demand’ (VOD) system” was already a “primary type of interactive television system.” ’388 patent at 1:57- 2:15. At that time, “[c]urrent VOD ads and program offerings are generally produced for mass audiences. It would be particularly desirable to adapt a VOD delivery platform to deliver ads promotions, programs, and informational content.” *Id.* at 2:61-63. The background further explains:

A primary type of interactive television system is referred to generally as a “video-on-demand” (VOD) system, wherein a viewer can enter a selection choice for a video program via the remote control unit to the set-top box and have the desired video program delivered instantaneously for display on the TV. Such VOD applications can include on-demand movies, documentaries, historic sports events, TV programs, infomercials, advertisements, music videos, short-subjects, and even individual screen displays of information. VOD-based interactive television services generally allow a viewer to use the remote control to cursor through an on-screen menu and select from a variety of titles for stored video programs for individual viewing on demand. Advanced remote control units include

button controls with VCR-like functions that enable the viewer to start, stop, pause, rewind, or replay a selected video program or segment. In the future, VOD-based interactive television services may be integrated with or delivered with other advanced interactive television services, such as webpage browsing, e-mail, television purchase (“t-commerce”) transactions, and multimedia delivery.

With the increasing interactive functionality and customer reach of interactive television services, advertisers and content providers are finding it increasingly attractive to employ on-demand advertising, program content, and TV transactions for home viewers. VOD content delivery platforms are being designed to seamlessly and conveniently deliver a wide range of types of advertising, content, and transaction services on demand to home viewers.

Id. at 2:9-35.

The named inventor of the asserted patents, Mr. Diaz, admitted that he did not invent the “cable” system or “VOD program guides” of the patents. ECF No. 152-5 (Diaz July 29, 2015 Tr.) at 492:12-14.

BBiTV’s expert on infringement, Dr. Hugh Smith, admitted that Mr. Diaz did not invent “cable television distribution system[s],” “video on demand,” or “electronic program guide[s].” ECF No. 152-4 (Smith Tr.) at 19:25-20:18, 28:3-7.

Mr. Diaz admitted that at the time of his alleged invention the Web-based content management system referenced in the ’388, ’750, ’751, and ’026 patents was available “off the market.” ECF No. 111-6 (Diaz July 30, 2015 Tr.) at 776:19-777:4.

Dr. Smith also admitted that “there would have been sites that allowed for video to be uploaded over the web” in the 1990s, and Mr. Diaz’s alleged invention did not improve web browsers or “how video content is compressed and then uploaded in packets over the web.” ECF No. 152-4 (Smith Tr.) at 38:1-39:9.

The specification of the ’825 patent states: “Hierarchical addressing is already well familiar to computer users through the hierarchical ordering of files stored in layers of folders on computers.” ’825 patent at 17:51-54. The specification of the ’026 patent similarly states: “The hierarchical addressing string of terms resembles URL addressing commonly used on the Internet.”’026 patent at 17:52-53. The specification of the ’026 patent states: “Typically, the publisher will select the categories and subcategories for categorizing the title of the video content from a standard categorization hierarchy” *Id.* at 3:61-64.

Mr. Diaz admitted that he did not invent “hierarchical categories and subcategories.” ECF No. 152-2 (Diaz July 30, 2015 Tr.) at 774:15-18. Smith admitted that Procter & Gamble already had a hierarchically organized inventory user interface in the 1980s. ECF No. 152-4 (Smith Tr.) at 18:8-19:24. Dr. Smith also admitted that Mr. Diaz did not invent the idea of “moving through data . . . in a drill down manner.” *Id.* at 26:2-7.

The specification of the ’388 patent states that a “template” is “an interactive television screen design.” ’388 patent at 11:3-5. One can obtain templates off-the-shelf from “a template design firm.” *Id.* at 7:62-67. BBiTV’s expert on validity, Dr. Shamos, admitted that the purpose of templates is to “maintain[] a consistent look.” ECF No. 111-2 (Shamos Rep.), ¶ 1063. Dr. Smith admitted that “[t]emplates were a known entity” at the time of

the alleged invention. ECF No. 152-4 (Smith Tr.) at 26:11-17.

The Templatized EPG Display standardizes the display of uploaded information, such as titles and cover art, at different levels of the Drill Down hierarchy and, because the use of templates, further minimizes the burden on the digital TV service provider to accommodate the increase in the amount of content made available on-demand, while ensuring that subscribers are not forced to scroll through endless and unformatted lists of content. ECF No. 202 at 11.

III. ADDITIONAL MATERIAL FACTS

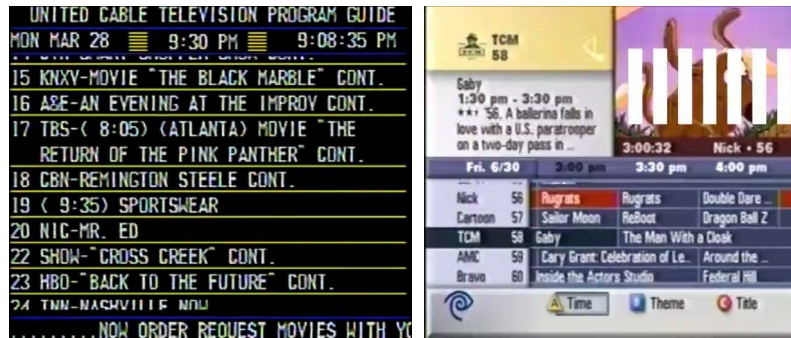
For purposes of summary judgment, the Court adopts the following additional material facts and inferences in favor of BBiTV.

EPG is a specialized type of software computer technology used to locate TV programming in a similar way that an electronic spreadsheet is used to access and manipulate information on a computer. ECF No. 202 at 2.

In 2004, VOD menus included only a few dozen titles. The inventor recognized a problem that while a few dozen titles is manageable for uploading information about the content to the TV provider's system and for viewers to select content of their choice, in the future a menu listing thousands of titles would be difficult to populate and difficult for users to use and navigate. *Id.* at 3. The inventor recognized that it was desirable to find a way for vast numbers of content publishers to transmit their programs to home TV, and to enable home TV viewers to find something of interest for viewing among the vast numbers of new programs. *Id.* The inventor recognized that VOD and EPG technologies could also be improved

by enabling large scale expansion of the underlying technology, which is software. *Id.* at 4.

At the time, EPGs, which are a specialized software used in set-top boxes in connection with providing video on demand to viewers, were rudimentary and not well suited for TV providers to display rapidly growing quantities of movies and information about movies for viewers to select from. Examples of early EPGs are as follows:



Id. at 4. The inventor recognized the problems associated with creating an effective EPG—how VOD content (e.g., movies) and description of content (e.g., information such as title, director, actors, etc.) would be uploaded to TV providers’ systems for use populating the EPG without undue labor by the TV provider, and how content and descriptive information about content would be organized and presented in an EPG in the most usable way to assist viewers to navigate the EPG software. *Id.* The inventor’s goal in the ’026 Patent was to improve the VOD platform by offering a gateway for greatly expanding TV viewing from a relatively small number of studio-produced program channels to a large number of new commercial publishers. *Id.* at 6.

By carrying over the hierarchical address metadata into EPG navigation, the invention allows the content to be automatically listed in the EPG under the common

addressing scheme to enable viewers to find any program of interest, relieving the VOD provider of overhead burden. *Id.* This improved how content and information describing content would be uploaded to a TV provider's system for use in an EPG significantly reducing the labor required to arrange the content and descriptive information in an EPG in a usable manner. *Id.*

IV. CONCLUSIONS OF LAW

A. No Collateral Estoppel Applies

The Court holds that collateral estoppel from *Broadband v. Oceanic* does not prevent BBiTV from defending related patents against § 101 challenges in this case. 135 F. Supp. 3d 1175. These related patents vary sufficiently in their claim scope compared to the '336 patent such that the Court cannot find that the identical issue was previously adjudicated.

Nonetheless, due to the similarity and substantial overlap of the issues, the Court treats *Broadband v. Oceanic*, 135 F. Supp. 3d 1175, as very persuasive authority.

B. The Asserted Claims of the '825 Are Directed to an Abstract Idea.

The asserted claims of the '825 patent are directed to the abstract idea of collecting and using a viewer's video history to suggest categories of video content. BBiTV characterization the focus of the '825 patent as "allowing the viewer to zero in on relevant content using a categorical organization scheme based on usage history," which uses different words to describe this idea. ECF No. 200 ("Aug. 30, 2022 Hearing Tr.") at 30:15-22.

The claims recite the use of a computer to do what humans—*i.e.*, clerks at video rental stores—have done for years: recommending certain types of videos based on a user's rental history. *See Intell. Ventures I LLC v.*

Symantec Corp., 838 F.3d 1307, 1318 (Fed. Cir. 2016) (holding that “methods of organizing human activity” are abstract ideas); *USC IP*, 2021 WL 6690275, at *4 (citing analogy to “a librarian identifying books for a student in a school library”). If someone likes Jackie Chan movies, then a video rental store clerk may suggest other similar movies to that person, such as Bruce Lee movies.

The Federal Circuit has held patents directed to collecting information about a user’s past behavior and providing content based on that information to be abstract and ineligible under § 101. *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1369-70 (Fed. Cir. 2015) (holding that “customizing web page content as a function of navigation history and information known about the user” was an abstract idea akin to newspaper inserts tailored based on known information about the customer); *Bridge & Post, Inc. v. Verizon Commc’ns, Inc.*, 778 F. App’x 882, 886-87 (Fed. Cir. 2019) (holding that claim reciting “retrieving historic information for the user [including] patterns of usage,” “generating a user profile based on the historic information,” and “analyzing . . . historic information . . . to determine a directed media component to be provided to the user” was directed to the abstract idea of “tailoring information based on [provided] data”) (citation omitted); *Customedia Techs., LLC v. Dish Network Corp.*, 951 F.3d 1359, 1363 (Fed. Cir. 2020) (holding that “delivering targeted advertising using a computer only as a tool” was ineligible subject matter); *see also BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1291 (Fed. Cir. 2018) (holding that “considering historical usage information while inputting data” was an abstract idea).

The asserted ’825 patent claims are analogous to those the Federal Circuit held invalid in *Free Stream Media*

Corp. v. Alphonso Inc., 996 F.3d 1355 (Fed. Cir. 2021). The claims at issue in that case recited “(1) gathering information about television users’ viewing habits; (2) matching the information with other content (i.e., targeted advertisements) based on relevancy to the television viewer; and (3) sending that content to a second device.” *Id.* at 1361-62. The Federal Circuit reversed the district court’s ruling of patent eligibility, holding that the claims were directed to the abstract idea of targeted advertising. *Id.* at 1361.

Like the *Free Stream Media* claims, claim 1 of the ’825 patent recites (1) gathering information about television users’ viewing habits (“a log of selection data corresponding to the viewer’s consumption of the video-on-demand programs”); (2) matching the information with an ordered list of category names (“determining . . . an order of relevance of a plurality of category names” based on the “selection data”); and (3) sending the ordered list to the user (“for said respective individual viewer selection of video-on-demand programs”). The ’825 patent claims are abstract and ineligible for the same reasons cited by the Federal Circuit in *Free Stream Media*.

The Court’s opinion in *USC IP Partnership, L.P. v. Facebook, Inc.*, 576 F. Supp. 3d 446 (W.D. Tex. 2021) is also instructive. The patent at issue there related to helping a website visitor “readily identify and navigate to the pages . . . that correspond to the visitor’s intent.” *Id.* at 451. It disclosed “an intent engine 20 that collects and analyzes intent data from visitors as they browse webpages within a namespace,” and infer intents and generate web page recommendations by “referencing historical intent data.” *Id.* For example, the user could “view and select” from a list of recommendations in the form of “a dropdown menu,” where the first item was a

webpage “most likely to provide the information that the visitor is seeking.” *Id.* at 453.

This Court granted summary judgment of invalidity under § 101 in *USC IP*, holding the claims were directed to the abstract idea of “collecting, analyzing and using intent data.” *Id.* at 456. The Court noted that “finding information that matches the user’s intent [] is a longstanding problem that existed long before the advent of computers and is not unique to the Internet.” *Id.* at 455. Despite reciting a black box “intent engine,” the claims provided “no explanation of how ‘processing’ steps are performed or how it causes the intent engine to determine an ‘inferred intent’ or ‘at least one recommended webpage.’” *Id.* at 455-46.

In the ’825 patent, the usage history database collects “the viewer’s consumption of the video-on-demand programs,” similar to the “intent data” collected in *USC IP*. ’825 patent, cl. 1. The TV service provider system then determines “an order of relevance of a plurality of category names” to show the user, similar to the ranked “drop down menu” of recommendations in *USC IP*. *Id.* Like the black box “intent engine” in *USC IP*, the asserted claims of the ’825 patent do not explain *how* to generate the ranked categories based on usage data—they claim the bare result of doing so. The asserted claims of the ’825 patent are thus directed to an abstract idea.

Many courts have held patents directed to collecting information about a user’s past behavior and providing content based on that information to be abstract and ineligible. *See, e.g., OpenTV, Inc. v. Netflix Inc.*, 76 F. Supp. 3d 886, 893-94 (N.D. Cal. 2014) (holding that “a method and system for profiling online users . . . based on their observed [internet] surfing habits and for selectively delivering content” in the form of a “dynamically generat-

ed” “individual list of items” was directed to an abstract idea); *Netflix, Inc. v. Rovi Corp.*, 114 F. Supp. 3d 927, 946 (N.D. Cal. 2015) (holding that “a system and method for providing personal recommendations based on a user’s viewing history” was directed to an abstract idea), *aff’d*, 670 F. App’x 704 (Fed. Cir. 2016); *Morsa v. Facebook, Inc.*, 77 F. Supp. 3d 1007, 1013 (C.D. Cal. 2014) (“[M]atching consumers with a given product or service ‘has been practiced as long as markets have been in operation.’”) (citation omitted), *aff’d*, 622 F. App’x 915 (Fed. Cir. 2015); *Sound View Innovations, LLC v. Facebook, Inc.*, 204 F. Supp. 3d 655, 662 (D. Del. 2016) (holding that “offering more meaningful information to an individual based on his own preferences” and the preferences of others was an abstract idea).

The ’825 patent claims are not directed to a new or improved graphic user interface. The claims simply require display of a generic list of categories and provide no other detail about the claimed interface. The Federal Circuit has held similar user interface claims ineligible. *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1234, 1241-43 (Fed. Cir. 2016) (invalidating under § 101 claim reciting a menu including “menu categories” and “menu items”). *Core Wireless* and *Data Engine* do not apply to this case. The claim in *Core Wireless* improved the user interface to show summary data even for an application “in an unlaunched state.” *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1362-63 (Fed. Cir. 2018). The claim in *Data Engine* improved the user interface by adding a “notebook tab” to navigate between spreadsheet pages. *Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999, 1008 (Fed. Cir. 2018). These cases teach that a claim to a user interface must describe a specific structure improving the interface itself. *Id.* at 1010-11. Here, howev-

er, the '825 patent claims a generic list of categories, such as shown in its Figure 5. This category list does not improve the interface of existing electronic program guides in any meaningful way.

The Court recognizes that the VOD and EPG are a “specialized type of software computer technology.” ECF No. 202 at 2. However, the claims merely implement abstract ideas in software without improvements to or unconventional combinations of underlying hardware.

Thus, at *Alice* step one, the asserted claims of the '825 patent are directed to the abstract idea of collecting information about a user’s viewing history and using that information to present categories of video content.

C. The Asserted Claims of the '825 Do Not Recite Any Inventive Concept or Technological Improvement.

The asserted claims of the '825 patent do not recite any inventive concept at *Alice* step two. The '825 patent admits that tracking systems that could collect the users’ viewing history were “conventional.” '825 patent at 7:28-38. The claims recite conventional databases for storing data, conventional servers for processing data, and conventional televisions for displaying data.

First, BBiTV contends that the claimed invention improves EPG and VOD software. The '825 inventor sought to implement a categorization scheme, allowing the EPG to present the VOD content by category, and further individualizing the EPG based on usage history and presenting the categories in an order of relevance based on the viewing history

That the computerized process claimed in the '825 patent could purportedly streamline the manual recommendation process or handle a larger selection of titles

does not make the claims any less abstract. *See Capital One*, 792 F.3d at 1367 (“[S]imply appending generic computer functionality to lend speed or efficiency to the performance of an otherwise abstract concept does not meaningfully limit claim scope for purposes of patent eligibility.”) (citation omitted); *id.* at 1370 (“[T]he fact that the web site returns the pre-designed ad more quickly than a newspaper could send the user a location-specific advertisement insert does not confer patent eligibility.”); *see also OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362-64 (Fed. Cir. 2015) (“[R]elying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible.”). The inventor may have recognized a business need to scale up a laborious process by using computers to process categories of data, but merely implementing an existing process on a computer to realize the inherent computational power of computers is not an inventive concept. *See Alice*, 573 U.S. 208.

The ’825 patent also does not disclose or claim any improvement to database technology. The claimed electronic program guide database and usage history database are generic databases without any particular, let alone improved, structure. *See* ’825 patent at 20:58-67. The databases of the ’825 patent merely “provide[] a generic environment in which the claimed method is performed.” *BSG Tech*, 899 F.3d at 1286; *see also Capital One*, 792 F.3d at 1371 (listing “database” as an example of “conventional computer components”); *Netflix*, 114 F. Supp. 3d at 946-47 (finding that “viewing history database” and “program listing database” were no different from a generic computer). Aside from the databases, the Court can discern no meritorious argument about any

other improvement hardware. BBiTV's arguments about the VOD and EPG are arguments about software.

Similarly, the '825 patent does not disclose or claim any new way of, or technological improvements to, the concept of logging in or starting new sessions. Claim 1 recites reordering the categories "at the start of each new session when said respective individual viewer logs onto their respective viewer-individualized electronic program guide." '825 patent, cl. 1. This claim element invokes logging in as a generic way to identify a user, which is ancillary to the overall goal of providing an individualized program listing. *See OpenTV*, 76 F. Supp. 3d at 894 (claim directed to an abstract idea despite reciting "wherein said individual list is dynamically generated for each user on user login").

Counsel for BBiTV argued at the hearing that "rebuild[ing] the electronic program guide menu, selectively reordering how that information is presented" is a technological improvement. Aug. 30, 2022 Hearing Tr. at 31:5-18, 44:12-21. But taking a list and changing the order of entries on that list could be performed by a human with paper and a pencil; this is not a technological improvement. *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1139 (Fed. Cir. 2016) (holding that claims are directed to an abstract idea where the idea could be "performed mentally or by pencil and paper," and the claims do not involve "an improvement in the computer as a tool.").

BBiTV argues that the '825 patent discloses a purportedly inventive "two-database architecture," but it does not specify any unconventional way in which the patent uses generic databases. ECF No. 133 at 16. The specification does not explain any benefit of using two databases instead of one. The two databases are just

conventional databases with functional names. *See Dropbox, Inc. v. Synchronoss Techs., Inc.*, 815 F. App'x 529, 532-33 (Fed. Cir. 2020) (holding that “functional abstraction” of a “black box” does not define a technological solution); *Netflix*, 114 F. Supp. 3d at 946-47 (finding that “functional descriptors” of “viewing history database” and “program listing database” did not make generic databases “something more particular”).

When considering the claimed elements as an ordered combination, the claims still lack an inventive concept. BBiTV argues that “combin[ing] individualization with [a] categorization scheme” is an inventive concept. ECF No. 133 at 15-16. BBiTV’s alleged inventive concept is simply a restatement of the abstract idea itself: using viewing history information to present categories of content. Combining two abstract ideas—categorization and individualization—is not inventive. *See RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) (“Adding one abstract idea . . . to another abstract idea . . . does not render the claim nonabstract.”).

When considering the ordered combination of a login process and recommending content, the claims still lack an inventive concept. The claims invoke databases and a login process in a logical order to achieve the goal of recommending content based on viewing history. The viewing history data must be stored somewhere, and a database located at a server is a conventional solution. Further, users must be able to identify themselves, and logging in is existing technology for doing so. The recited limitations are inherent and logically required to accomplish the abstract idea. Continuing the earlier video store clerk analogy, the login process is like seeing a patron returning in through the doors of the video store

with the Jackie Chan movie—an event that naturally proceeds the clerk recommending a Bruce Lee movie.

The asserted dependent claims are also non-inventive. Dependent claim 10 allows users to identify themselves by “select[ing] their name from a list of previously registered viewers.” ’825 patent, cl. 10. This claim describes a process of automating the input of user names, and “mere automation of manual processes using generic computers does not constitute a patentable improvement in computer technology.” *Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1055 (Fed. Cir. 2017).

Dependent claim 15 recites “automatically generating an additional category or subcategory” based on usage history data. ’825 patent, cl. 15. Creating additional categories or subcategories is still part of the abstract idea of recommending content. This is akin to the video store clerk making up suggestions on the spot when a customer returns a Jackie Chan movie. He would encourage renting Bruce Lee movies, kung fu movies, eastern karate movies, western action movies, or whatever other category he can come up with to improve business.

Dependent claim 17 recites “a user profile database” which is also used for determining the “order of relevance of the category names.” *Id.*, cl. 17. Maintaining user profiles is a conventional technique to provide targeted information. *Bridge & Post*, 778 F. App’x at 887 (“The remaining limitations, including . . . ‘generating a user profile . . .,’ and ‘storing the user profile . . .,’ are generic computer functions performed in the service of implementing targeted marketing . . .”). The ’825 patent admits that third party firms were able to create user profiles using the viewing history data. ’825 patent at 7:38-41. The claim also does not explain what additional data are stored in the user profile database or how such

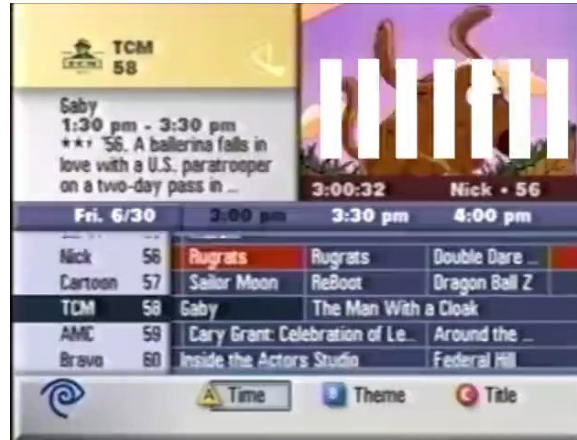
data are combined with the usage history data to determine the order of relevance. Such functional claiming does not provide an inventive concept to the abstract idea.

Therefore, the asserted claims of the '825 patent do not recite any inventive concept at step two of *Alice*. The claims are invalid under 35 U.S.C. § 101.

D. The Asserted Claims of '388, '750, '751, and '026 Patents Are Directed to an Abstract Idea.

The asserted claims of the '388, '750, '751, and '026 patents are directed to the abstract idea of receiving hierarchical information and organizing the display of video content. The focus of these claims is (1) receiving video content and associated metadata from a content provider, and (2) displaying titles hierarchically at a client device according to the provided metadata. In other words, this directed to a computerized implementation of the business process of receiving video content and information from people who want to show videos, such as using an intake form or template, and then using that form/template information to present to viewers a hierarchy of information about available videos.

An example of an early EPG is shown below. It includes information that a content provider would need to give or that the TV guide provide would need to obtain, such as the title of the video content, the time for showing the video, the channel, theme, and a description of the video.



ECF No. 202 at 4. The problem was that parties were providing, receiving, and processing this information in a laborious way. *See id.* Using a computer to receive and process this information in a standardized format allowed people to realize the inherent computational power of computers to do it faster and at scale.

The Federal Circuit’s decision in *In re TLI Communications, LLC Patent Litigation*, 823 F.3d 607, 610-11 (Fed. Cir. 2016) makes clear that the asserted claims of the ’388, ’750, ’751, and ’026 patents are abstract. The claim in *TLI* recited recording images in a telephone, transmitting the images along with “classification information” to a server, extracting the “classification information,” and storing the images in the server according to the “classification information.” *Id.* at 610. The Federal Circuit held that the claim was directed to the abstract idea of “classifying an image and storing the image based on its classification.” *Id.* at 612. Like the claims in *TLI*, which recited the sending of classification information along with images, here the asserted claims require a content provider to upload metadata including

category information for organizing the uploaded content.

In addition to uploading metadata and video content, the claims here also recite organizing video titles by displaying them in a hierarchical manner. In *Ameranth*, the patent at issue described a digital menu for use in the restaurant industry, including “categories such as appetizers and entrees [and] items such as chicken Caesar salad.” 842 F.3d at 1235. The claim recited “menu categories” and “menu items,” “displayable in a window of said graphical user interface in a hierarchical tree format.” *Id.* at 1234. The Federal Circuit held that the claim reciting the “hierarchical tree format” was directed to an abstract idea, and the same is true here. *See id.* at 1241; *see also EMG Tech., LLC v. Etsy, Inc.*, No. 6:16-CV-00484-RWS-JDL, 2017 WL 6261810, at *6 (E.D. Tex. Jan. 25, 2017) (holding that “displaying information in a hierarchical tree format on a computer screen” was an abstract idea).

The claims of the asserted patents are not directed to a new and improved graphic user interface. *Core Wireless, Data Engine*, and *Trading Technologies* do not apply here. While the claims in those cases provided specific structures to improve the user interfaces—an application summary showing data “in an un-launched state,” *Core Wireless*, 880 F.3d at 1362-63, a “notebook tab” to navigate between spreadsheet pages, *Data Engine*, 906 F.3d at 1008, and a pair of “dynamic display” and “static display,” *Trading Techs. Int’l, Inc. v. CQG, INC.*, 675 F. App’x. 1001, 1003 (Fed. Cir. 2017)—here organizing information in a hierarchy is a longstanding human practice whether it is performed on a piece of paper or on a TV screen.

The claims also recite a “Web-based content management system” or WBCMS as a server system that receives the video content and the metadata from content providers. The claims, however, do not specify how the “Web-based” interface should operate or what “management” tasks are accomplished. Rather, they recite the WBCMS as a conduit of information over the Internet. Therefore, the WBCMS is a generic server to carry out “data collection, recognition, and storage” tasks—quintessential functions of a server. *See Content Extraction*, 776 F.3d at 1347. Using existing Web or Internet technology does not transform that server into eligible subject matter, as “the use of the Internet is not sufficient to save otherwise abstract claims from ineligibility under § 101.” *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 716 (Fed. Cir. 2014); *see also Capital One*, 792 F.3d at 1370 (finding that an “interactive interface that manages web site content” did not confer eligibility because it “simply describes a generic web server with attendant software”).

With respect to “templates,” as discussed above, BBiTV has repeatedly confirmed that templates are just a generic environment to implement the claimed EPG, and courts have found templates to be an abstract concept. The use of templates is ancillary to the overall goal of displaying titles hierarchically in an EPG. Adding that concept does not save the claims under *Alice*. *See RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) (“Adding one abstract idea . . . to another abstract idea . . . does not render the claim non-abstract.”). Moreover, the use of templates to intake information is a routine and conventional practice.

The Court recognizes that the VOD and EPG are a “specialized type of software computer technology.”

ECF No. 202 at 2. However, the software itself merely implements abstract ideas without improvements to or new combinations of underlying hardware.

Therefore, at step one of *Alice*, the asserted claims of the '388, '750, '751, and '026 patents are directed to the abstract idea of receiving hierarchical information and organizing the display of video content accordingly.

E. The Asserted Claims of the '388, '750, '751, and '026 Patents Do Not Recite Any Inventive Concept.

The asserted claims of the '388, '750, '751, and '026 patents lack an inventive concept because they recite only generic and conventional components, arranged in a conventional manner, and provide only conventional functionalities.

The claimed WBCMS is a generic server for “data collection, recognition, and storage” using the existing Internet. *See Content Extraction*, 776 F.3d at 1347. Mr. Diaz admitted that at the time of his alleged invention the WBCMS was available “off the market.” ECF No. 111-6 (Diaz July 30, 2015 Tr.) at 776:19-777:4. BBiTV’s expert also admitted that “there would have been sites that allowed for video to be uploaded over the web” in the 1990s, and Mr. Diaz’s alleged invention did not improve web browsers or “how video content is compressed and then uploaded in packets over the web.” ECF No. 152-4 (Smith Tr.) at 38:1-39:9. Such admissions preclude any factual dispute as to whether a WBCMS is conventional at *Alice* step two. *See, e.g., Berkheimer v. HP Inc.*, 881 F.3d 1360, 1370 (Fed. Cir. 2018) (finding certain claims ineligible based on inventor’s admission that “parsers and the functions they perform existed for years before his patent”); *see also Elec. Power Grp.*, 830 F.3d at 1355 (finding no inventive concept where “[n]othing in the

claims, understood in light of the specification, requires anything other than off-the-shelf, conventional computer, network, and display technology”).

The Hawaii Court expressly found WBCMS to be conventional at *Alice* step two. *Broadband v. Oceanic*, 135 F. Supp. 3d at 1192-94 (D. Haw. 2015). This is important because BBiTV has described the ’336 patent as “directed to . . . the web-based content management system.” Aug. 30, 2022 Hearing Tr. at 21:24-22:10. This Court is persuaded by the reasoning of the Hawaii Court and similarly finds that the use of a WBCMS not an inventive concept.

Hierarchical navigation and the use of templates cannot provide the inventive concept, either; as discussed above, they are fundamental human practices that courts have long held to be abstract. “[T]he abstract idea itself . . . cannot supply the inventive concept that renders the invention significantly more than that ineligible concept.” *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 774 (Fed. Cir. 2019) (internal quotations and citation omitted).

Indeed, the specification of the ’825 patent confirms: “Hierarchical addressing is already well familiar to computer users through the hierarchical ordering of files stored in layers of folders on computers.” ’825 patent at 17:51-54. The specification of the ’026 patent added: “The hierarchical addressing string of terms resembles URL addressing commonly used on the Internet.” ’026 patent at 17:52-53. Mr. Diaz admitted that he did not invent “hierarchical categories and subcategories.” ECF No. 152-2 (Diaz July 30, 2015 Tr.) at 774:15-18. BBiTV’s expert also admitted that Procter & Gamble already had a hierarchically organized inventory user interface in the 1980s. ECF No. 152-4 (Smith Tr.) at 18:8-19:24.

The asserted claim elements are also non-inventive when considered as an ordered combination. The discrete WBCMS, drill down navigation, and templated VOD displays features do not combine in an unconventional way. Instead, they describe a logical sequence of handling information: WBCMS for collecting information, drill down navigation for organizing information, and templated VOD displays for presenting information. They all perform their intended functions in a conventional way to implement the abstract idea. Drilling down through categories of information is not something unique to a user interface and does not solve a problem inherently rooted in computer technology.

None of the dependent claims recite any inventive concept either. Claim 13 of the '388 patent, claim 8 of the '750 patent, and claim 8 of the '751 patent each recite a “templated video-on-demand display” comprising a “background” and “areas” for displaying metadata. Claim 3 of the '751 patent recites “different display templates” corresponding to “different levels of the hierarchical structure.” Similar to the three-layer structure in the '026 patent, the additional specificities regarding templates do not alter the abstract nature of the template concept.

Claim 17 of the '388 patent recites a “search interface” to search video content. But “using [an] index to search for and retrieve data” is also an abstract idea. *Intellectual Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1328 (Fed. Cir. 2017).

Finally, claim 7 of the '750 patent and claim 6 of the '026 patent recites “topics” pertaining to “more than one video content provider,” and claim 7 of the '026 patent recites “category terms” corresponding to “one or more content providers.” Using topics and categories to classi-

fy information is a fundamental human practice. There is also nothing inventive about having multiple content providers instead of one.

Therefore, the asserted claims of the '388, '750, '751, and '026 patents do not recite any inventive concept at step two of *Alice*. The claims are invalid under 35 U.S.C. § 101.

F. No Monopolization

The Court agrees with BBiTV that the claims do not monopolize or preempt a field of technology or fundamental tool of science. While monopolization is a driving concern behind section 101, BBiTV presents no authority that allows the Court to reach a different decision based on the lack of monopolization alone.

V. CONCLUSION

This is a case where no disputes of material fact hinder summary judgment about what was routine and conventional in the Section 101 context. Instead, the Court relies on a record full of facts from the background of the patents, statements by the plaintiff's witnesses, and statements in the plaintiff's briefs. The Court generally credits BBiTV's arguments that its inventor was the first to implement certain existing business practices on computer systems to make the process faster and scalable, but this alone is insufficient to transform those business practices into something more than a computer implementation of an abstract idea. In this way, the case is like *Alice*, where the claims covered the practice of hedging as implemented on a computer. 573 U.S. 208. Against a background where the Hawaii Court already held similar claims ineligible in a related patent, the patent owner here has not persuaded this Court that differences in the claimed technology require a different outcome.

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Defendants' Motion is **GRANTED**. ECF No. 111. The Court holds the '825, '388, '750, '751, and '026 Patents invalid under 35 U.S.C. § 101.

SIGNED this 30th day of September, 2022.

/s/ Alan D Albright
United States District Judge

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APPENDIX C
UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

CASE No. 6:20-cv-00921-ADA

BROADBAND iTV, INC.,
Plaintiff,

v.

AMAZON.COM, INC., AMAZON.COM SERVICES LLC AND
AMAZON WEB SERVICES, INC.,
Defendants,

FINAL JUDGMENT

On September 30, 2022, the Court entered a Memorandum Opinion and Order (ECF No. 204) that granted Amzon.com, Inc.; Amazon.com Services LLC; and Amazon Web Services, Inc.'s (collectively, "Defendants") Motion for Summary Judgment of Invalidity under 35 U.S.C. § 101 and held that certain claims U.S. Patent Nos. 9,973,825 (the "'825 patent"), 9,648,388 (the "'388 patent"), 10,536,750 (the "'750 patent"), 10,536,751 (the "'751 patent"), 10,028,026 (the "'026 patent") are invalid under 35 U.S.C. § 101. Specifically, claims 1, 10, 15 and 17 of the '825 patent, claims 1, 13 and 17 of the '388 patent, claims 1, 7 and 8 of the '750 patent, claims 1, 3 and 8 of the '751 patent, and claims 1, 6 and 7 of the '026 patent (collectively, "the Asserted Claims") were found invalid under 35 U.S.C. § 101.

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In accordance with the Memorandum Opinion and Order (ECF No. 204) and pursuant to Rule 54(b) of the Federal Rules of Civil Procedure, it is hereby **ORDERED** and **ADJUDGED** that:

1. All the Asserted Claims are invalid under 35 U.S.C. § 101.
2. This FINAL JUDGMENT starts the time for filing any appeal.

Signed this 24th day of October, 2022.

/s/ Alan D Albright
United States District Judge