

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LIFE TECHNOLOGIES CORPORATION,
Petitioner,

v.

UNISONE STRATEGIC IP, INC.,
Patent Owner.

Case CBM2015-00037
Patent 6,996,538 B2/C1

Before JACQUELINE WRIGHT BONILLA, HYUN J. JUNG, and
NEIL T. POWELL, *Administrative Patent Judges*.

BONILLA, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
Covered Business Method Patent Review
35 U.S.C. § 328(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

A. *Background*

Life Technologies Corp. (“Petitioner”) filed a Petition requesting covered business method patent review of claims 52, 62, 67, 70–76, 81, 83–85, and 96 of U.S. Patent No. 6,996,538 B2/C1 (Ex. 1001, “the ’538 patent”) under § 18 of the Leahy-Smith America Invents Act (“AIA”).¹ Paper 1 (“Pet.”). Unisone Strategic IP, Inc. (“Patent Owner”) filed a Preliminary Response. Paper 7 (“Prelim. Resp.”). On June 29, 2015, we instituted a covered business method patent review (Paper 8, “Institution Decision” or “Inst. Dec.”) on the ground that the challenged claims are directed to patent ineligible subject matter under 35 U.S.C. § 101. Inst. Dec. 26.

Subsequently, Patent Owner filed a Patent Owner Response (Paper 15, “PO Resp.”), and Petitioner filed a Reply (Paper 17, “Reply”).

Additionally, Patent Owner filed a Motion for Observation on Cross Examination of Petitioner’s declarant Dr. Michael Siegel (Paper 26, “Mot. Obs.”), to which Petitioner filed a Response (Paper 30). Patent Owner also filed a Motion to Exclude Evidence (Paper 25, “Motion to Exclude”), Petitioner filed a Response to Patent Owner’s Motion to Exclude Evidence (Paper 31), and Patent Owner filed a Reply (Paper 33). Patent Owner also filed a Motion to Strike Portions of Petitioner’s Reply (Paper 27, “Motion to Strike”), to which Petitioner filed a Response (Paper 32).

An oral hearing was held on March 4, 2016, and a transcript of the hearing is included in the record (Paper 36, “Tr.”).

¹ Pub. L. No. 112–29, 125 Stat. 284, 296–07 (2011).

We have jurisdiction under 35 U.S.C. § 6(c). We issue this Final Written Decision pursuant to 35 U.S.C. § 328(a) and 37 C.F.R. § 42.73.

For the reasons that follow, we determine that Petitioner has demonstrated by a preponderance of the evidence that claims 52, 62, 67, 70–76, 81, 83–85, and 96 of the '538 patent are unpatentable under 35 U.S.C. § 101 as being directed to non-statutory subject matter

B. Related Matters

The parties indicate that the '538 patent is the subject of the following district court cases: *Unison Strategic IP, Inc., v. TraceLink, Inc.*, 3-13-cv-01743 (S.D. Ca.) (2013); *Unison Strategic IP, Inc. v. Life Technologies Corp.*, 3-13-cv-01278 (S.D. Ca.) (2013). Pet. 4–5 (citing Ex. 1005); Paper 6, 2.

C. The '538 Patent

The '538 patent relates to methods and systems of electronic inventory tracking by a third party, for example via the Internet. Ex. 1001, Abstract, 1:18–20, 46–58. The specification states that the “present invention improves upon the prior art by shifting the burden of inventory tracking onto a third party; this concept is referred to as vendor managed inventory, or VMI.” *Id.* at 1:45–48. As further stated, “[w]hen a third party provides VMI services for multiple companies, it gains significant buying power which it can use to negotiate better deals, improve supplier responsiveness, and streamline the buying process.” *Id.* at 1:48–52.

The methods and systems facilitate “inventory management by tracking inventory and automatically contacting suppliers, manufacturers, or distributors when additional supplies are needed.” *Id.* at 1:59–63, 2:45–50. As also described in the specification, “[w]hile purchasing is a large part of

inventory maintenance, the present invention may also facilitate other transactions,” such as allowing “customers to resell products or equipment to other businesses,” or other communication between customers. *Id.* at 2:7–11; 4:37–51.

Figure 1 in the ’538 patent, reproduced below, is a block diagram showing “the major hardware components of the present invention.” *Id.* at 2:23–24; 2:54–55.

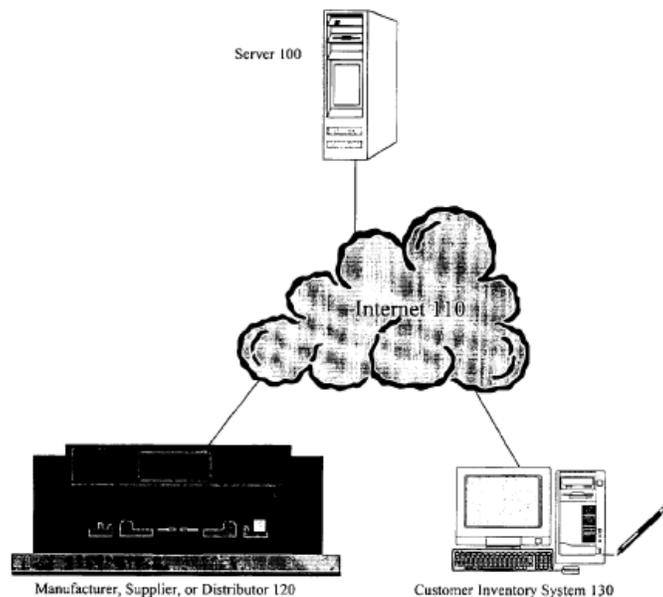


Figure 1 depicts Server 100, Internet 110, and Customer Inventory System 130, which “may be used to track inventory, place special orders, and interact with other customers.” *Id.* at Fig. 1, 2:54–60.

As part of Customer Inventory System 130, a “client may include custom software, such as an application written in Visual Basic, JAVA, or C; commercial software, such as a web page accessible through a web browser; or a combination of custom and commercial software.” *Id.* at 2:58–3:2. Customer Inventory System 130 also “may allow manual inventory tracking,

semi-automated inventory tracking, or inventory may be dispensed using automated systems.” *Id.* at 3:3–10.

Figure 2 in the ’538 patent presents an embodiment of Server 100, and “software components of the present invention.” *Id.* at 2:25–27, 4:58–65. In a block diagram format, Figure 2 generally depicts Firewall 210, Web Server 220, Database Server 230, and Application Server 240. *Id.* at 4:61–65. The specification indicates that examples of Web Server 220 and Database Server 230 include commercially available software. *Id.* at 5:1–25.

As described in the specification, “Application Server 240 may contain business rules associated with the present invention, which can be used to interpret Database Server 230 data,” and also may monitor inventory levels, contact vendors, adjust inventory information, and facilitate resale of equipment or products, based on information stored in Database Server 230. *Id.* at 5:26–37. “Web Server 220, Database Server 230, and Application Server 240 each represent software which may run on the same computer, or on multiple computers.” *Id.* at 5:38–42.

D. Illustrative Claim

As noted above, Petitioner challenges claims 52, 62, 67, 70–76, 81, 83–85, and 96. Claims 52 (system), 67 (method), and 81 (computer program product) are independent. Claim 67 is illustrative of the claimed subject matter and is reproduced below, as allowed in *ex parte* Reexamination Control No. 90/013,050 (Ex. 1008):

67. A method for inventory management, comprising:
 - (a) collecting and storing, on one or more databases having client software, at least the following data:

(1) customer inventory information, the customer inventory information including a number of items at a customer,

(2) inventory and cost information for a plurality of manufacturers, suppliers, or distributors, the inventory information for the plurality of manufacturers, suppliers, or distributors including: a product identifier and a number of items in manufacturer, supplier or distributor inventory, and

(3) inventory restocking parameters provided by said customer;

(b) evaluating via at least one computer said customer inventory information and inventory or cost information for a plurality of manufacturers, suppliers, or distributors in light of said restocking parameters provided by said customer;

(c) ordering manufacturer, supplier, or distributor inventory which best fulfills said inventory restocking parameters provided by said customer;

(d) tracking inventory items in said databases for (1) the number of items at said customer and (2) the number of items at said manufacturer, supplier, or distributor, as inventory items are added to, restocked to, or removed from said inventories;

(e) updating said data on said one or more databases, using information obtained in said inventory tracking, through at least one software interface to said databases; and

(f) providing access via client software to information in said one or more databases to each said customer, manufacturer, supplier, or distributor,

wherein said client software allows one or more customers, manufacturers, suppliers, or distributors to be classified into groups, and where permissions or roles are assigned to such groups.

Ex. 1008, 22–23; 33, 4:5–43.

II. ANALYSIS

A. Claim Construction

We interpret claims in an unexpired patent according to the broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.300(b); *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1278–80 (Fed. Cir. 2015) (“Congress implicitly approved the broadest reasonable interpretation standard in enacting the AIA,” and “the standard was properly adopted by PTO regulation.”), *aff’d sub nom. Cuozzo Speed Techs. LLC v. Lee*, No. 15–446, 2016 WL 3369425, at *12 (U.S. June 20, 2016) (upholding the use of the broadest reasonable interpretation standard).

Claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Any special definition for a claim term must be set forth with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

Both Petitioner and Patent Owner present constructions for several claim terms. Pet. 19–24; PO Resp. 12–23. For example, Patent Owner asserts that Petitioner misconstrues the term “customer” by defining it as “a buyer (person or organization) that uses the claimed inventory management.” PO Resp. 15; Pet. 19–20. Consistent with the specification of the ’538 patent, we adopt Patent Owner’s construction of “customer” as referring to a “buyer of products via the present invention” (Ex. 1001, 5:52–56), i.e., a buyer of products using the inventory management system recited in the respective claims.

Patent Owner also presents constructions in relation to other claim terms such as “inventory restocking parameters provided by said customer,” “tracks” or “tracking,” “access” to information according to “assigned permissions or roles,” and “detecting.” PO Resp. 18–23. For many of the reasons stated in Petitioner’s reply to those constructions, we decline Patent Owner’s invitation to import inappropriately “computerized” aspects into those general terms, notwithstanding the fact that the challenged claims elsewhere recite computer components, such as a “computer,” “databases,” and “software.” Reply 23–25; *see also* Ex. 1001, 3:3–10 (stating that Customer Inventory System 130 allows manual inventory tracking).

For purposes of this Decision otherwise, however, we need not expressly construe claim terms further. *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (only claim terms in controversy need to be construed, and only to the extent necessary to resolve the controversy).

B. Covered Business Method Patent

Section 18 of the AIA provides for the creation of a transitional program for reviewing covered business method patents. Section 18 limits review to persons or their privies that have been sued or charged with infringement of a “covered business method patent,” which does not include patents for “technological inventions.” AIA §§ 18(a)(1)(B), 18(d)(1). 37 C.F.R. § 42.302 states “[c]harged with infringement means a real and substantial controversy regarding infringement of a covered business method patent exists such that the petitioner would have standing to bring a declaratory judgment action in Federal court.”

Petitioner states that it was sued for infringement of the '538 patent in *Unisone Strategic IP, Inc. v. Life Technologies Corp.*, 3-13-cv-01278 (S.D. Ca.) on June 3, 2013, and is not estopped from challenging the '538 patent in the instant proceeding. Pet. 13 (citing Ex. 1005). Patent Owner does not dispute this statement.

1. Financial Product or Service

A “covered business method patent” is a patent that “claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, except that the term does not include patents for technological inventions.” AIA § 18(d)(1); 37 C.F.R. § 42.301(a). A patent need have only one claim directed to a covered business method to be eligible for review. Transitional Program for Covered Business Method Patents—Definitions of Covered Business Method Patent and Technological Invention; Final Rule, 77 Fed. Reg. 48,734, 48,736 (Aug. 14, 2012) (“CBM Rules”) (Comment 8).

Petitioner asserts that the challenged claims are directed to “methods and computer systems for activities that are financial in nature, i.e., inventory management to support product sales, including customer interfaces and data management related thereto, as well as tracking and storing cost information related to those products.” Pet. 6 (citing Ex. 1006 ¶ 35). Petitioner points to the U.S. Patent and Trademark Office’s classification of the '583 patent in Class 705, as well as claim language such as “collecting and storing . . . inventory and cost information,” as recited in claim 67. *Id.* at 7–8. Petitioner also points to where the specification states that “purchasing is a large part of inventory maintenance,” and states that the

invention facilitates the resale of products. *Id.* at 8–9 (quoting Ex. 1001, 2:7–19, 5:31–36).

Patent Owner asserts that Petitioner does not establish that any challenged claim satisfies the financial product or service requirement of AIA § 18(d)(1). PO Resp. 30–32; Prelim. Resp. 21–22. For example, Patent Owner argues that patent classification and the cited portions of the ’538 patent specification are misplaced. PO Resp. 30–31. Patent Owner also contends that none of the claims are directed to a financial transaction because although “payment may occur elsewhere as a result of the recited inventory orders, the patent itself distinguishes between the act of ordering inventory, which is claimed, and payment for inventory, which is not.” *Id.* at 32. According to Patent Owner, because “challenged claims deal with inventory tracking and ordering, not payment, [they] do not recite a covered business method as defined by the AIA.” *Id.*

The phrase “financial product or service” in AIA § 18(d)(1) is not limited to the products or services of the “financial services industry.” CBM Rules, 77 Fed. Reg. at 48,735–36. As recognized in relevant legislative history: “[t]o meet this [eligibility] requirement the patent need not recite a specific financial product or service. Rather, the patent claims must only be broad enough to cover a financial product or service.” 157 Cong. Rec. S1365 (daily ed. Mar. 8, 2011) (statement of Sen. Schumer). The legislative history also explains that “the definition of covered business method patent was drafted to encompass patents ‘claiming activities that are financial in nature, incidental to a financial activity or complementary to a financial activity.’” 157 Cong. Rec. S5432 (daily ed. Sept. 8, 2011) (statement of Sen. Schumer).

We agree with Petitioner that subject matter recited in the challenged claims is directed to activities that are financial in nature. For example, claim 67 recites “*collecting and storing, on one or more databases . . . inventory and cost information*” and “*inventory restocking parameters provided by said customer,*” and “*ordering . . . inventory which best fulfills said inventory restocking parameters provided by said customer,*” and “*providing access via client software to information in said one or more databases to each said customer.*” Ex. 1008, 22–23; 33, 4:5–43 (emphases added).

We are persuaded that collecting cost information and providing a customer access to that information amounts to a financial service, and that ordering inventory based on information provided by a customer is a financial activity. This is consistent with the specification of the ’538 patent, which confirms the challenged claims’ connection to financial activities by stating that “*purchasing is a large part of inventory maintenance,*” and that the subject matter of the challenged claims is directed to “*inventory management.*” Ex. 1001, 2:7–11; 4:37–51. The specification also describes its invention in the context of “*gain[ing] significant buying power,*” which can be used “*to negotiate better deals, improve supplier responsiveness, and streamline the buying process.*” *Id.* at 1:48–52.

We determine that a preponderance of the evidence shows that at least one claim, such as claim 67, encompasses activities that are financial in nature, incidental to a financial activity, or complementary to a financial activity. CBM Rules, 77 Fed. Reg. at 48,735.

We are not persuaded by Patent Owner’s assertion that the challenged claims do not recite “payment.” Section 18(d)(1) of the AIA does not include such a requirement. *See Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1325 (Fed. Cir. 2015) (stating “as a matter of statutory construction, the definition of ‘covered business method’ is not limited to products and services of only the financial industry, or to patents owned by or directly affecting the activities of financial institutions such as banks and brokerage houses,” and the “plain text of the statutory definition contained in § 18(d)(1) . . . on its face covers a wide range of finance-related activities”). Because claim 67, recites, *inter alia*, ordering products based on collected “inventory restocking parameters,” which necessarily relates in nature to the financial sale of products, we determine the claim is directed towards “a method . . . for performing data processing or other operations used in the practice, administration, or management of a financial product or service” (AIA § 18(d)(1)), covers “finance-related activities” (*Versata*, 793 F.3d at 1325), and recites “activities that are financial in nature” (CBM Rules, 77 Fed. Reg. at 48,735). Thus, the first part of the definition of § 18(d)(1) is satisfied.

2. *Exclusion for Technological Inventions*

The definition of “covered business method patent” in § 18(d)(1) of the AIA does not include patents for “technological inventions.” To determine whether a patent is for a technological invention, we consider “whether the claimed subject matter as a whole recites a technological feature that is novel and unobvious over the prior art; and solves a technical problem using a technical solution.” 37 C.F.R. § 42.301(b). Both prongs

must be satisfied in order for the patent to be excluded as a technological invention.

The following claim drafting techniques, for example, typically do not render a patent a “technological invention”:

(a) Mere recitation of known technologies, such as computer hardware, communication or computer networks, software, memory, computer-readable storage medium, scanners, display devices or databases, or specialized machines, such as an ATM or point of sale device.

(b) Reciting the use of known prior art technology to accomplish a process or method, even if that process or method is novel and non-obvious.

(c) Combining prior art structures to achieve the normal, expected, or predictable result of that combination.

Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,763–64 (Aug. 14, 2012).

Petitioner asserts that the challenged claims do not fall within § 18(d)(1)’s exclusion for “technological inventions” because the claims (1) fail to recite a novel and unobvious technological feature, and (2) fail to recite a technical solution that solves a technical problem. Pet. 10–13 (citing 37 C.F.R. § 42.301).

a. A Technological Feature that Is Novel and Unobvious over the Prior Art

In relation to the first prong, Petitioner points to a Notice of Intent to Issue a reexamination certificate in relation to the ’538 patent. Pet. 10–11 (quoting Ex. 1008). Petitioner contends, when allowing the reexamined claims, the Examiner “believed that the patentable features were not a new computer, a new database or anything technical, but rather . . . based upon *the kind of information* in the system.” *Id.* at 11; Ex. 1008, 6–7. Petitioner

further contends that, even assuming the method of using certain inventory-related data was novel, such data are not “technological” features. Pet. 11–12.

Patent Owner responds that Petitioner fails to provide sufficient claim analysis and mischaracterizes the Examiner’s statements made during reexamination. PO Resp. 24–25; Prelim. Resp. 9–14, 16–17. Patent Owner also points to certain claim language, such as the “computerized dynamic inventory ordering based on the customer’s inventory restocking parameters and inventory and cost information collected from a plurality of sellers,” as recited in some fashion in challenged claims 52, 67, and 81. PO Resp. 25. Patent Owner refers to declaration testimony by its expert witness, Dr. Douglas Thomas (Ex. 2005), as stating that an ordinary artisan “would have understood that this inventory ordering process uses networked computer hardware and custom software to perform dynamic processing of the recited information to produce real world results.” *Id.* (citing Ex. 2005 ¶ 54). Thus, according to Patent Owner, the process “is plainly technical.” *Id.*

Patent Owner also contends that the challenged claims include “a database access system for providing permission- or role-based access to information provided by one or more customers and a plurality of sellers.” *Id.* at 26. Patent Owner argues that this is “facially technical” in nature, and “the petition contains no prior art analysis even purporting to demonstrate that this technical feature is not novel or nonobvious.” *Id.*

In addition, although Patent Owner acknowledges that the claims encompass embodiments that “build upon and utilize commercially-available hardware and software,” Patent Owner contends that the “platforms are designed to operate in conjunction with custom-software that

causes the system as a whole to operate as a new, specially-programmed machine.” *Id.* at 26–27. In support, Patent Owner points to disclosures in the specification indicating that Application Server 240 uses certain “business rules,” which according to Patent Owner’s witness, Dr. Thomas, “is just another word for specialized programming.” *Id.* at 27.

As noted above, to be eligible for review, a patent need only have one claim directed to a covered business method, and not a technological invention. CBM Rules, 77 Fed. Reg. at 48,736. Thus, for the purposes of our analysis here, we focus on method claim 67. The technological features of claim 67 include “one or more databases,” “client software,” and “at least one computer.” Based on the complete record before us, we are persuaded that claim 67 does not recite a technological feature that is novel or unobvious over the prior art.

The specification does not indicate that the recited technological features are novel and nonobvious. Rather, the ’538 patent clarifies that the asserted novelty of the invention is not in any specific improvement of software or hardware, but in a method of collecting, evaluating, tracking, updating, and providing access to specific inventory-related information, and ordering inventory based on certain information.

For example, as noted above, the specification describes Server 100, Internet 100, and Customer Inventory System 130 in general terms, as depicted in Figure 1, indicating that Customer Inventory System 130 “may be used to track inventory, place special orders, and interact with other customers.” Ex.1001, Fig. 1, 2:54–60. The specification states that Customer Inventory System 130 may include “commercial software, such as a web page accessible through a web browser,” i.e., software already

commercially available to the public. *Id.* at 2:58–3:2. Figure 2 presents an embodiment of Server 100 and “software components of the present invention,” generally depicting Web Server 220, Database Server 230, and Application Server 240. *Id.* at 2:25–27, 4:58–65; Fig. 2. The specification indicates that examples of Web Server 220 and Database Server 230 include commercially available software. *Id.* at 5:1–25.

As Patent Owner discusses (PO Resp. 26–27), the specification of the ’538 patent states that “Application Server 240 may contain business rules associated with the present invention, which can be used to interpret Database Server 230 data,” and monitor inventory, for example, based on information stored in Database Server 230. Ex. 1001, 5:26–37. When discussing a “Database Design,” the specification likewise refers to “rules” that “may be utilized in a preferred embodiment of the present invention.” *Id.* at 6:31–58.

As noted above, however, the specification does not indicate that any server or database hardware itself is novel or non-obvious, rather than information placed in the database and monitored and interpreted by a server. Consistently, the specification indicates generally that “Web Server 220, Database Server 230, and Application Server 240 each represent software which may run on the same computer, or on multiple computers.” *Id.* at 5:38–42.

Similarly, claim 67 itself, in view of the specification, does not indicate that it requires any specialized computer, hardware, software, database access system, or server, rather than encompass the use of general components, as presented in Figures 1, 2, and 5 of the specification, that are used to collect, store, evaluate, use (e.g., to order or track inventory), or

update certain data and information recited in the claim. The use of well known, commercially available software, database access systems, or servers to manipulate or use data in a new way, using a new method of data/information gathering, analysis, and manipulation, for example, is not sufficient to transform the subject matter of claim 67 into a novel and unobvious technological feature. *See* Office Patent Trial Practice Guide, 77 Fed. Reg. at 48,763–64 (stating that “claim drafting techniques would not typically render a patent a technological invention,” such as “[r]eciting the use of known prior art technology to accomplish a process or method, even if that process or method is novel and non-obvious”).

Along those lines, we also agree with Petitioner that during reexamination, the Examiner indicated it was data used in the method, not anything of a technical nature, that was novel and non-obvious over cited prior art. Pet. 10–11; Ex. 1008, 5–7.

Thus, we determine that at least challenged claim 67 fails to recite a novel and unobvious technological feature.

b. Solves a Technical Problem with a Technical Solution

In relation to the second prong, Petitioner contends that the ’538 patent “does not claim an improvement in any computer-related technology but merely the use of various inventory-related information with already existing computer technology.” Pet. 12 (citing Ex. 1006 ¶ 36).

Patent Owner responds that inventory management computer systems in the prior art had “technical problems” because they “traditionally facilitated inventory management between a customer and a single seller,” and “lacked the ability to make automated, coordinated inventory decisions for multiple sellers.” PO Resp. 28. Patent Owner contends that its claimed

invention solves such problems by “providing a unified third-party networked computer system that collects, stores, and processes inventory and cost information from multiple sellers and from one or more customers.” *Id.* at 28–29 (citing Ex. 2005 ¶ 60). Patent Owner further contends that the claimed invention provides a technical solution to a technical problem relating to data security in a networked computer environment by “applying role- or permission-based database access to its unified collection of sensitive information from multiple sellers on networked computers.” *Id.* at 29–30 (citing Ex. 2005 ¶ 61).

We agree with Petitioner that claim 67 fails to recite a technical solution that solves a technical problem. We are persuaded that a method of collecting, evaluating, tracking, updating, and providing access to specific inventory-related information, and ordering inventory based on certain information, does not relate to a technical problem. Pet. 12. We also are persuaded, as Petitioner contends, that challenged claim 67 “does not claim an improvement in any computer-related technology but merely the use of various inventory-related information with already existing computer technology.” *Id.*

The ability to make inventory decisions for multiple sellers, as well as the ability to apply “role- or permission-based” database access to sensitive computer information from multiple sellers, as discussed by Patent Owner, do not stem from a “technical solution” in relation to an improvement of the technical components themselves, i.e., the recited databases and software. Rather, they come from knowing what data and information to store, analyze, use, and manipulate (e.g., by assigning “permissions or roles”) with those databases and software. The analysis, use, and manipulation of data

and information at issue here does not correspond to a technical solution that solves a technical problem.

Thus, we determine that challenged claim 67 does not recite a technological invention.

3. Conclusion

For the foregoing reasons and based on the full record before us, we determine that claim 67 recites activities that are financial in nature. In addition, we determine that claim 67 as a whole does not recite a technological feature that is novel and unobvious over the prior art, and does not recite a technical solution that solves a technical problem. Thus, we conclude that the '538 patent is a covered business method patent under § 18(d)(1) of the AIA, and is eligible for review using the transitional covered business method patent program.

C. 35 U.S.C. § 101

Petitioner challenges claims 52, 62, 67, 70–76, 81, 83–85, and 96 as being directed to patent-ineligible subject matter under 35 U.S.C. § 101. Pet. 24–57. Patent Owner contends otherwise. PO Resp. 32–56.

For claimed subject matter to be patent-eligible, it must fall into one of four statutory classes set forth in 35 U.S.C. § 101: a process, a machine, a manufacture, or a composition of matter. *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 713–714 (Fed. Cir. 2014). Here, each of the challenged claims recites a “process” or “machine,” i.e., a “system” comprising “at least one computer” (claim 52), a “method for inventory management” (claim 67), or a “computer program product” comprising “at least one computer readable storage medium” (claim 81), under § 101.

The Supreme Court recognizes, however, three “important implicit” exceptions of subject matter that are ineligible for patent protection: “Laws of nature, natural phenomena, and abstract ideas.” *Alice Corp. Pty, Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014) (quoting *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013) (internal quotation marks omitted)); *Bilski v. Kappos*, 561 U.S. 593, 601 (2010). Thus, a law of nature or an abstract idea by itself is not patentable. That said, a practical application of the law of nature or abstract idea may be deserving of patent protection. *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293–94 (2012). To be patentable, however, a claim must do more than simply state the law of nature or abstract idea and add the words “apply it.” *Id.*

In *Alice*, the Supreme Court clarified the process for analyzing claims to determine whether claims are directed to patent-ineligible subject matter. The Supreme Court applied the framework set forth previously in *Mayo* “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice*, 134 S. Ct. at 2355.

The first step in the analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* If they are directed to a patent-ineligible concept, the second step in the analysis is to consider the elements of the claims “individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 132 S. Ct. at 1298, 1297). In other words, the second step is to “search for an ‘inventive concept’—i.e., an element or combination of elements that is

‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Id.* (alteration in original) (quoting *Mayo*, 132 S. Ct. at 1294). Further, the “prohibition against patenting abstract ideas ‘cannot be circumvented by attempting to limit the use of the formula to a particular technological environment’ or adding ‘insignificant postsolution activity.’” *Bilski*, 561 U.S. at 610–11 (quoting *Diamond v. Diehr*, 450 U.S. 175, 191–92 (1981)).

Analyzing the challenged claims using the two-step process applied in *Alice*, Petitioner asserts that all challenged claims are directed to an abstract idea without additional elements that transform the claims into a patent-eligible application of that idea. Pet. 24–57. Specifically, Petitioner argues that the challenged claims are directed to the abstract idea of “inventory management.” *Id.* at 25.

1. *Claims 67 and 70–76—Abstract Idea*

Petitioner asserts that all challenged claims recite an abstract idea because “they are directed to the fundamental business and economic practice of inventory management, a ‘fundamental economic practice long prevalent in our system of commerce’” under *Alice*. Pet. 26 (citing *Alice*, 134 S. Ct. at 2356 (citation omitted)).

Claim 67 recites a “method for inventory management” comprising:

- (a) “*collecting and storing*, on one or more databases having client software” certain data, including customer inventory information, inventory and cost information, and “inventory restocking parameters provided by said customer,”
- (b) “*evaluating* via at least one computer” such information,
- (c) “*ordering* . . . inventory which best fulfills said inventory restocking parameters provided by said customer,”

- (d) “*tracking* inventory items in said databases,”
- (e) “*updating* said data on said one or more databases,” and
- (f) “*providing access* via client software to information,”
wherein the software allows customers, etc. “to be
classified into groups, and where permissions or roles are
assigned to such groups.”

Ex. 1008, 22–23; 33, 4:5–43 (emphases added).

Based on the complete record before us, we determine that claim 67 is directed to the abstract idea of managing inventory in view of information. We are persuaded that managing inventory in view of collected and analyzed customer inventory, cost information, restocking information provided by a customer, as recited in claim 67, describes the basic concept of inventory management, i.e., a “fundamental economic practice.” *Alice*, 134 S. Ct. at 2356. The method of claim 67 is sufficiently similar in this regard to the method of hedging against financial risk at issue in *Bilski*, 130 S.Ct. 3218 (2010), and the idea of intermediated settlement at issue in *Alice*, 134 S. Ct. at 2356–57 (discussing *Bilski*). *See also Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1344 (Fed. Cir. 2013) (holding the abstract idea at the heart of a system claim to be “generating tasks [based on] rules . . . to be completed upon the occurrence of an event” (citation omitted)).

Patent Owner contends that Petitioner fails to meet its burden of demonstrating that the challenged claims are directed to ineligible subject matter. As an initial matter, Patent Owner argues that testimony by Petitioner’s expert, Dr. Siegel, is inadmissible or irrelevant. PO Resp. 33–44. Patent Owner contends that “Dr. Siegel admits he is unqualified to testify on this topic.” *Id.* at 34–37.

What Patent Owner clarifies, however, is that Dr. Siegel has “no degrees in inventory management or similar fields such as supply chain control or logistics” *per se*, and has “not studied, for a profession, the history of inventory management.” *Id.* at 34–35 (citing Ex. 2005, 16:14–21, 41:22–42:3). According to Patent Owner, “Dr. Siegel admits he has no expertise in information management history and only attempted to educate himself in order to prepare his declaration.” *Id.* at 35. It is clear from Dr. Siegel’s testimony, however, that he has extensive experience in “the use of information technology with business strategy and operations,” has handled professionally “issues related to the integration of information” using computer and software systems, and holds advanced degrees in engineering and computer science. Ex. 1006 ¶¶ 3–11.

We are satisfied that Dr. Siegel possesses sufficient qualifications to testify on matters that are relevant to our analysis here, including matters that do not concern the alleged “ancient” history of inventory management. PO Resp. 35. For example, Dr. Siegel testifies that relevant aspects of automated inventory management and VMI were well known before the priority date of the ’538 patent. Ex. 1006 ¶¶ 25–28 (citing Ex. 1018); Ex. 1027 ¶¶ 5–22 (citing Exs. 1020-1022, 1024, 1025). Dr. Siegel also testifies that the ’538 patent specification describes hardware and software that “require only generic computer implementation—not specialized hardware or software.” Ex. 1006 ¶¶ 43–54, 78–79, 89. In addition, Dr. Siegel discusses general concepts of inventory management using a computer and whether certain limitations of the challenged claims can be performed mentally, using pen and paper, or manually, without use of a computer. *Id.* at ¶¶ 40, 58–66, 80, 90.

Patent Owner also argues more generally that the challenged claims are not directed to an abstract idea. PO Resp. 44–56. For example, Patent Owner contends that “the challenged claims are directed to a specific implementation of a particular type of VMI that uses specially programmed computers in a networked environment to perform tangible operations in a novel way to produce tangible results.” *Id.* at 44–45 (citing Ex. 2005 ¶ 65).

As noted above, however, independent claim 67 recites “collecting and storing” data, “evaluating” information, “ordering” and “tracking” inventory, “updating” data, and “providing access” to certain information. When considering those limitations and the complete record before us, Petitioner persuades us that claim 67 and its dependent claims 70–76 are directed to an abstract idea, namely, performing the fundamental economic and conventional business practice of inventory management based on collected data and customer information. Pet. 18–19, 25–26, 37–38 (citing Ex. 1006 ¶¶ 25–28, 40, 56); Ex. 1018; Reply 3–9, 15–17 (citing Ex. 1027 ¶¶ 5–22); Exs. 1020–1022, 1024, 1025); *see also Content Extraction and Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1347 (Fed. Cir. 2014) (“Applying *Mayo/Alice* step one, we agree with the district court that the claims of the asserted patent are drawn to the abstract idea of 1) collecting data, 2) recognizing certain data within the collected data set and 3) storing that recognized data in a memory. The concept of data collection, recognition, and storage is undisputedly well-known. Indeed, humans have always performed these functions.”).

Patent Owner argues that “[e]ach of the claims also recites some form of ‘ordering,’ which provides a tangible, real-world impact achieved by the claimed computer technology.” PO Resp. 46. Petitioner sufficiently

establishes, however, that ordering inventory that “best fulfills said inventory restocking parameters provided” by a customer, as recited in claim 67, for example, was a basic, already well-known aspect of inventory management and corresponds to an action that can be done manually (e.g., by making a telephone call), without benefit of a computer. Pet. 40–42, 46; Ex. 1006 ¶¶ 58, 61, 62, 80. Likewise, Petitioner sufficiently establishes that the “tracking” inventory items, as recited in challenged claims, also corresponds to a previously well-known concept that could be performed mentally or manually with pen and paper. Pet. 40–41; Ex. 1006 ¶ 58.

Patent Owner further argues that “the claims recite a software interface that restricts access to certain portions of the database based on the roles or permissions of the users,” and that such an interface is “a physical and logical barrier that prevents unauthorized database access by remote users.” PO Resp. 46. In this regard, claim 67, for example, recites “providing access via client software to information . . . , wherein said client software allows one or more customers, manufacturers, suppliers, or distributors to be classified into groups, and where permissions or roles are assigned to such groups.”

Petitioner sufficiently establishes that providing or restricting access to customer information to distributors or suppliers, for example, based on who is assigned permission or roles, as a general matter, was a well-known process that could be performed manually, or by using already commercially available computer products, such as Windows NT and SQL Server. Pet. 40–41 (citing Ex. 1006 ¶ 58), 51 (discussing claims 52 and 62, reciting similar limitations); Ex. 1006 ¶ 80; Reply 15; Ex. 1027 ¶¶ 11–22. Moreover, “any novelty in implementation of the idea is a factor to be

considered only in the second step of the *Alice* analysis.” *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014). We therefore address below the limitations regarding roles and permissions in our analysis for the second step of the *Alice/Mayo* test.

We recognize that the Federal Circuit recently has stated that the first step of our analysis should not be *pro forma* when the claims are directed to improvements in software. *See Enfish, LLC v. Microsoft Corp.*, No. 2015-1244 , 2016 WL 2756255, at *4 (Fed. Cir. May 12, 2016) (“We thus see no reason to conclude that all claims directed to improvements in computer-related technology, including those directed to software, are abstract and necessarily analyzed at the second step of *Alice*, nor do we believe that *Alice* so directs”). We are not persuaded, however, that the instant claims are directed to a specific improvement to the way computers operate.

As discussed above, the challenged claims are directed to the abstract idea of inventory management that takes advantage of certain data and information that is collected, stored, evaluated, and used, and provides access to information based on assigned permissions and roles. The recited databases, software, computer, and assigned permissions or roles perform their normal functions, as used in their ordinary capacity. We are not persuaded “the plain focus” of the challenged claims here “is on an improvement to computer functionality itself, not on economic or other tasks for which a computer is used in its ordinary capacity.” *Enfish, LLC*, 2016 WL 2756255, at *5. Thus, we determine that challenged claims 67 and 70–76 are directed to an abstract idea, and the first step in the *Alice/Mayo* test is met for those claims. *See id.* at *4 (stating “For instance, fundamental

economic and conventional business practices are often found to be abstract ideas, even if performed on a computer.”).

2. *Claims 67 and 70–76—Alleged Inventive Concept*

Accordingly, we next consider whether limitations of the challenged claims “individually and ‘as an ordered combination’” provide additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 132 S. Ct. at 1298, 1297). That is, we determine whether the claims include an “inventive concept,” i.e., an element or combination of elements sufficient to ensure that the patent in practice amounts to significantly more than a patent on the abstract idea itself. *Id.* at 2357. The Supreme Court in *Alice* cautioned that merely limiting the use of an abstract idea “to a particular technological environment” or implementing the abstract idea on a “wholly generic computer” is not sufficient as an additional feature to provide “practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.” *Id.* at 2358.

Thus, not every included additional feature will suffice. Those additional elements must be more than “well-understood, routine, conventional activity.” *Mayo*, 132 S. Ct. at 1298; *see Ultramercial*, 772 F.3d at 716 (“[E]ach of those eleven steps merely instructs the practitioner to implement the abstract idea with ‘routine, conventional activit[ies],’ which is insufficient to transform the patent-ineligible abstract idea into patent-eligible subject matter.” (second alteration in original)); *Content Extraction & Transmission*, 776 F.3d at 1348 (“[Patentee] conceded at oral argument that the use of a scanner or other digitizing device to extract data from a document was well-known at the time of filing, as was the ability of

computers to translate the shapes on a physical page into typeface characters” (citations omitted); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (holding that the subject of the patent claims was “beyond question of ancient lineage” (citation omitted)).

As noted above, the complete record before us sufficiently establishes that each of steps (a)–(f) of claim 67 instructs a practitioner to implement an abstract idea, i.e., an inventory management system or method that obtains and uses certain data and information, using “one or more databases having client software” and “at least one computer.” The record before us, including the challenged patent itself, also establishes that such databases, software, and computer were well-known at the time of filing, i.e., “routine, conventional” activities to implement a method of collecting, storing, and analyzing (evaluating, ordering products based on, tracking, updating, and providing access to) information or data. Pet. 30–39; 1006 ¶¶ 43–57; Reply 17–18; *Mayo*, 132 S. Ct. at 1298. Petitioner persuades us that the recited steps are not tied to any particular hardware, software, or algorithm, and the description in the ’538 patent is consistent with that conclusion. Pet. 30–39.

As discussed above, the specification of the ’538 patent indicates that the server, internet, and customer inventory system used in the method of claim 67, as depicted in Figure 1, involve general computer components. Moreover, as also described in the specification, the claimed invention may involve publicly available commercial software. *See* Ex. 1001, 2:58–3:2 (stating a “client may include . . . commercial software, such as a web page accessible through a web browser “). Patent Owner does not persuade us otherwise by asserting that its invention relates to a “narrower subset of VMI

computer systems” that uses hardware that is “specially programmed” to collect and store certain data. PO Resp. 47–49; *see Alice*, 134 S. Ct. at 2359 (stating “[u]sing a computer to create and maintain ‘shadow’ accounts amounts to electronic recordkeeping—one of the most basic functions of a computer” and “[t]he same is true with respect to the use of a computer to obtain data, adjust account balances, and issue automated instructions; all of these computer functions are ‘well-understood, routine, conventional activit[ies]’ previously known to the industry.”); *see also In re TLI Commc’ns LLC Patent Litigation*, 2016 WL 2865693, at *6 (determining a server fails to add an inventive concept because it is a generic computer performing well-understood, routine, and conventional activities previously known to the industry) (citing *Alice*, 134 S.Ct. at 2359–60).

For example, the specification states that Customer Inventory System 130 may include software already commercially available to the public. Ex. 1001, 2:58–3:2. In addition, the specification describes “software components of the present invention” in general terms, depicting Web Server 220, Database Server 230, and Application Server 240, as examples. *Id.* at 2:25–27, 4:58–65; Fig. 2. The specification indicates that Web Server 220 and Database Server 230 include commercially available software, i.e., general software available for purchase from companies. *Id.* at 5:1–25 (stating “Web server 220 represents software [that] include Internet Information Server, developed by Microsoft Corporation . . . Database Server 230 represents commercially available database software.”).

We note that the specification states that “Application Server 240 may contain business rules associated with the present invention, which can be used to interpret Database Server 230 data,” and monitor inventory, for

example, based on information stored in Database Server 230. *Id.* at 5:26–42. As discussed above, however, the specification does not indicate that any specific server, database, or computer hardware itself is necessary. Rather, the specification provides specificity in relation to information placed on a database and monitored and interpreted by a server. *See also* Pet. 30–37 (discussing other aspects of the ’539 patent specification). Also, when considered as an ordered combination, we determine that the recited components of claim 67 add nothing that is not already present when its steps are considered individually. *See Alice*, 134 S. Ct. at 2359 (“Considered ‘as an ordered combination,’ the computer components of petitioner’s method ‘ad[d] nothing . . . that is not already present when the steps are considered separately.’”). We further address below a recent Federal Circuit decision that relates to an ordered combination of claim limitations.

Claims 70–76 depend from claim 67. Those claims further recite “forecasting inventory usage or inventory availability” based on information (claim 70), client software that “monitors inventory levels and reports anticipated shortages” (claim 72) or “allows users to order new inventory items or to supplement inventory” (claim 73), or additional details regarding collecting and storing, or updating, information recited in claim 67 (claims 74–76). Once again, such features do not require any specific server, database, or computer hardware *per se*, but rather provide specificity only in relation to recited information and how it is used.

Thus, the complete record before us sufficiently establishes, as Petitioner contends, that the method of claims 67 and 70–76 require “generic

computer implementation . . . not specialized hardware or . . . software.”
Pet. 30–39.

Patent Owner argues that the decision by the Federal Circuit in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014), dictates that the challenged claims include an inventive concept. As noted by Patent Owner, the Federal Circuit states there that an invention “necessarily rooted in computer technology to overcome a problem specifically arising in the realm of computer networks” is patent-eligible. *DDR Holdings*, 773 F.3d at 1257. As argued by Patent Owner, the “court further noted that the claims did not preempt every application of the relevant idea, but rather recited a specific way of solving a problem faced by websites on the Internet.” PO Resp. 50 (citing *DDR Holdings*, 773 F.3d at 1259).

Patent Owner then argues that the challenged claims here “describe a specific improvement over existing approaches to electronic VMI by providing specially programmed computer systems that combine technology in novel ways to address technical inadequacies in existing systems.” *Id.* at 50–53. For example, according to Patent Owner, the challenged claims provide “computerized inventory ordering via a third-party networked computer system that dynamically analyzes information . . . in order to provide improved, automated decision-making in a multi-seller environment.” *Id.* at 51–56. Patent Owner argues that the challenged claims also provide “a technical solution . . . that allows multiple users to collaborate with confidence via a third-party-managed networked computer system that mediates access and information interchange according to permissions or roles.” *Id.* at 54. Along those lines, Patent Owner contends that the claimed software “provides electronic data security that enables

third-party collection and storage of sensitive data, such as inventory and cost information from multiple sellers.” *Id.* at 56.

Consistent with contentions in the Petition, Petitioner replies that the generic recitation of a “database that stores information received from various sources . . . amounts to conventional computer activities or routine data-gathering steps.” Reply 17. Petitioner further responds, in relation to Patent Owner’s arguments regarding “automatic or computer-based inventory evaluation and ordering,” that “relying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible.” *Id.* at 18 (quoting *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015), also citing *Intellectual Ventures I LLC v. Capital One Bank*, 792 F.3d 1363, 1370 (Fed. Cir. 2015)).

Petitioner also responds that the underlying process of claim 67, for example, can be performed manually, relying on deposition testimony by Patent Owner’s expert, Dr. Thomas, in support. *Id.* at 18–19 (quoting Ex. 1029, 208:13–209:20); *see also* Ex. 1029, 201:7–209:20 (providing additional testimony for context). Petitioner further cites to testimony by Dr. Siegel indicating that network security, including that involving role-based permissions to prevent exposure of sensitive information via networked computer systems, was well known and commercially available, for example in SQL Server and Windows NT. Reply 19–20 (citing Ex. Ex. 1027 ¶¶ 17–22).

Based on the complete record before us, we are not persuaded that the holding in *DDR Holdings*, addressing claims of a different type, dictates that that the challenged claims here, directed to inventory management, are patent-eligible. For example, for the reasons discussed above, we are

persuaded that Petitioner demonstrates sufficiently that the “one or more databases,” “client software,” and “computer” components of claim 67, and dependent claims 70–76, are generic and correspond to conventional computer implementation. Pet. 30–38, 50–51; Reply 17 (stating that the generic recitation of a “database that stores information received from various sources . . . amounts to conventional computer activities or routine data-gathering steps”).

As also discussed above, even assuming the information and data collected, stored, evaluated, used (e.g., to order inventory), tracked, and updated in the method of claim 67 (i.e., the limitations reciting an abstract idea) are novel and non-obvious over the prior art, the record before us does not indicate that the challenged claims recite a novel or non-obvious aspect in relation to the recited database, software or computer *per se*. The challenged claims do not address problems particular to the use of databases, software, and computers, rather than the general concept of inventory management. *See DDR Holdings*, 773 F.3d at 1257 (stating that although the claims in that case “address a business challenge (retaining website visitors), it is a challenge particular to the Internet”).

For example, as noted above, nothing in claim 67 (or its dependent claims 70–76), nor the specification of the ’538 patent, indicates that any specific software or server is necessary when implementing Application Server 240. Rather, the claims, which recite “client software” or “software” generally, as well as the specification, indicate specificity only in relation to information collected, stored, evaluated, tracked, updated, or otherwise acted upon, by software in the described servers. Ex. 1001, 5:38–42; *see also*

Pet. 33–37 (discussing “Server 100” as presented in Figure 2 and otherwise described in the ’539 patent specification).

In addition, based on the complete record before us, we are persuaded that, although claim 67 recites “databases,” “software” and “computer” generally, the recited steps can be performed mentally or using pen and paper. Pet. 39–41 (citing *Gottschalk v. Benson*, 409 U.S. 63, 66–67 (1972)). For example, the record indicates that one can order inventory using pen and paper or by telephone (step (c)), manually provide access to written down inventory information, and mentally classify customers, for example, into groups having assigned permission or roles (step (f)). *Id.* We likewise are persuaded that features recited in dependent claims 70–76 (“forecasting” inventory usage or availability (claim 70), software that “monitors” inventory and “generates orders” (claims 71, 72), “allows users to order” or “supplement inventory” (claim 73), and collecting and storing or updating additional information (claims 74–76)) can be performed mentally or using pen and paper. *Id.* at 41–42.

Lastly, we note a recent decision by the Federal Circuit in *Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC*, No. 2015-1763 (Fed. Cir. June 27, 2016). That decision addresses the two step analysis of *Alice*, for example, in the context of Federal Circuit cases such as *Enfish* and *DDR Holdings*. *Id.* at slip op. 11–20. We read *Bascom* to confirm our understanding of *Enfish* and its application here regarding the first step of *Alice*. *See, e.g., id.* at slip op. 13 (stating that the “*Enfish* claims, understood in light of their specific limitations, were unambiguously directed to an improvement in computer capabilities”) (citing *Enfish*, 2016 WL 2756255 at *5).

We also acknowledge that *Bascom* states, in relation to the second step under *Alice*, that the “inventive concept inquiry requires more than recognizing that each claim element, by itself, was known in the art,” and that “an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces.” *Id.* at slip op. 15. Applying that standard, in relation to claims directed to filtering content from the Internet, the Federal Circuit held that the second step of *Alice* was satisfied because it “represents a ‘software- based invention[] that improve[s] the performance of the computer system itself.’” *Id.* at slip op. 17–18 (stating that like *DDR Holdings*, where the patent “claimed a technical solution to a problem unique to the Internet,” the patent in *Bascom* claimed a “technology-based solution . . . to filter content on the Internet that overcomes existing problems with other Internet filtering systems . . . making it more dynamic and efficient”) (citations omitted).

As discussed above, we determine that the ’538 patent and the challenged claims in this case are not directed to an improvement of the technical equipment itself, i.e., the recited databases and software. Rather, any inventive concept comes from knowing what data and information to place, analyze, use, and manipulate on those databases and software. Arguments and the record before us fail to indicate that an “ordered combination” of the conventional non-abstract elements of the challenged claims (i.e., the recited databases and software, rather than gathered and analyzed recited data and information) are presented in “non-conventional and non-generic arrangement.” *Id.* at slip op. 15, 20. Based on the complete record, the challenged claims cannot be “read to ‘improve[] an existing technological process.’” *Id.* at slip op. 17 (citing *Alice*, 134 S. Ct. at 2358).

The challenged claims are more similar to those found unpatentable in *OIP*, which “simply required the performance of the abstract idea . . . on generic computer components using conventional computer activities” and “was simply the generic automation of traditional . . . techniques.” *Id.* at slip op. 18 (citing *OIP*, 788 F.3d at 1363). Thus, we again determine that the challenged claims do not pass either step of *Alice*’s two-part framework.

In sum, claims 67 and 70–76 recite subject matter directed to an abstract idea of performing the fundamental economic and conventional business practice of inventory management based on collected data and customer information. We are not persuaded that the remaining limitations of the challenged claims “individually and ‘as an ordered combination’” provide additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 134 S. Ct. at 2355. Having considered the complete record before us, we determine that Petitioner has established by a preponderance of the evidence that challenged claims 67 and 70–76 are not directed to patent-eligible subject matter and, therefore, are unpatentable under 35 U.S.C. § 101.

3. *Claims 52 and 62*

Petitioner asserts that “one of ordinary skill in the art would not discern any substantive difference” between system claim 52 and method claim 67. Pet. 50. Petitioner also contends that certain limitations recited in claim 52 relating to a computer having at least one storage medium, client software, and software interface again require only generic computer implementation, and not any specialized hardware or software. *Id.* at 50–51. Petitioner also contends that the underlying process of claim 52, such as “identification of users and allowing users to be classified into groups,

where permissions or roles are assigned to such groups, could be performed via pen and paper.” *Id.* at 51–52.

In its Response, Patent Owner provides essentially the same arguments in relation to all challenged claims. PO Resp. 32–56. Regarding claim 52, for example, Patent Owner responds that in this claim, the recited software “evaluates” certain information “for a plurality of manufacturers, suppliers, or distributors in light of said restocking parameters provided by said customer,” and “automatically orders . . . inventory which best fulfills said inventory restocking parameters.” PO Resp. 25, 46, 53 (quoting claim 52 in the ’538 patent). Patent Owner contends that independent claims 67 and 81 “recite similar limitations,” although they do not recite that ordering takes place “automatically.” *Id.* at 25, 53 (stating that “claim 67 requires that the evaluating be performed ‘via a computer,’ and the evaluating and ordering in claim 81 is performed by a computer executing the recited computer program product”). Patent Owner also contends that claim 52 provides “a database access system for providing permission- or role-based access to information provided by one or more customers and a plurality of sellers.” *Id.* at 26. Again, Patent Owner states that independent claims 67 and 81 “recite similar limitations.” *Id.*

We agree with Petitioner that claim 52 is very similar to method claim 67. *See Alice*, 134 S.Ct. at 2360 (stating the Supreme Court “has long ‘warn[ed] . . . against’ interpreting § 101 ‘in ways that make patent eligibility “depend simply on the draftsman’s art.””). For example, recited “data” to be stored is identical, *see* (b)(1)–(3) in claim 52 and (a)(1)–(3) in claim 67. Claim 52 similarly recites allowing users to be classified into groups, where permissions or roles are assigned to such groups, *see* (c) in

claim 52 and (f) in claim 67, as well as evaluating, tracking, and updating similar inventory information, and ordering inventory based on “inventory restocking parameters provided by said customer,” *see* (c)(i)–(iv) in claim 52, and (b)–(e) in claim 67.

In addition, referring to similar arguments and evidence as relied upon in relation to claims 67 and 70–76, Petitioner establishes sufficiently that each additional limitation in claims 52 and 62 “requires only generic computer implementation, as none of them require[s] any specialized hardware or software.” Pet. 50–51. Petitioner also establishes sufficiently that the additional limitations in those claims (as compared to claim 67), mentioned with particularity, can all be performed by pen and paper and, therefore, qualify as mental steps. *Id.* at 51–52.

Having considered the complete record before us, for the reasons discussed just above and in detail in relation to claims 67 and 70–76, we are persuaded that Petitioner has established by a preponderance of the evidence that challenged claims 52 and 62 are not directed to patent-eligible subject matter and, therefore, are unpatentable under 35 U.S.C. § 101.

4. *Claims 81, 83–85, and 96*

Petitioner asserts that independent “claim 81 is not different in substance from claim 67,” and that “differences boil down to merely a computer-readable medium and updating the databases through a software interface.” Pet. 55. In addition, Petitioner contends that, although claim 81 recites a “computer program product” and “software interface,” steps (a)–(f), like steps (a)–(f) in claim 67, can be performed via pen and paper. Pet. 54–56. Petitioner also asserts that it “does not analyze separately . . . dependent

claims 83–85 and 96 because they are . . . substantially the same as claims 71–73 and 62,” addressed elsewhere in the Petition. *Id.* at 55.

We agree with Petitioner that claim 81 is similar to method claim 67, except that claim 81 recites a “computer program product” comprising “program instructions stored on at least one computer readable storage medium,” that “cause a computer” to engage in steps (a)–(f). Step (a) of claim 81 recites accessing from databases the same type of data recited in step (a) of claim 67. Steps (b)–(f) are similar to those same steps in claim 67, except that the tracking step further recites it “is executed by detecting each said inventory item and by updating said databases through at least one software interface to said databases.”

As with claim 67, we are persuaded that steps (a)–(f) of claim 81 instruct a practitioner to implement an abstract idea, i.e., a method for managing customer inventory based on certain information, using a “computer program product,” “at least one computer readable storage medium” executed on a “computer,” and “at least one software interface.” For the same reasons discussed above regarding claim 67 (and its challenged dependent claims), we agree that claim 81 (and dependent claims 83–85 and 96) do not require any specific computer program product, storage medium, computer, and software interface *per se*, but rather provide specificity only in relation to recited information and how it is used. Thus, we conclude that the first prong in the *Alice/Mayo* test is met for claims 81, 83–85, and 96.

In relation to the second prong in *Alice/Mayo*, we also are persuaded that such computer program product, storage medium, computer, and software interface were well-known at the time of filing, i.e., “routine, conventional” activities to implement a method of accessing and analyzing,

or taking action based on (evaluating, ordering inventory based on, tracking, updating, and providing access to) information or data. Pet. 55–56; *Mayo*, 132 S. Ct. at 1298. We are persuaded that the recited steps are not tied to any particular hardware, software, or algorithm, and descriptions in the ’538 patent are consistent with that conclusion, for the same reasons discussed above in relation to claim 67. Pet. 30–38. Based on the record before us, the additional feature in claim 81 that “tracking is executed by detecting said inventory item,” as noted by Patent Owner (Prelim. Resp. 39), does not change our analysis in this regard, even if that feature is not recited in method claim 67.

Based on the current record, we also are persuaded by Petitioner’s contentions that, although claim 81 recites a “computer program product,” “computer readable storage medium,” “computer,” and “software interface” generally, the recited steps can be performed mentally or using pen and paper. Pet. 55–56, 40–42. For example, one can manually access written down inventory information (step (a)), order inventory, and evaluate, track, detect, update, and provide access to inventory information or items using pen and paper (steps (b)–(f)), as well as mentally classify customers, for example, into groups having assigned permission or roles (step (f)). *Id.*

The record sufficiently establishes that, like other challenged dependent claims, features recited in dependent claims 83–85 and 96 (“monitoring inventory levels” and “reporting anticipated shortages” or “generating orders” (claims 83, 84), “allowing users to order” or “supplement inventory” (claim 85), and “allowing users to specify a price for goods” (claim 96)) can be performed mentally or using pen and paper. Pet. 55, 41–42, 52.

Having considered the complete record before us, for the reasons discussed just above and in detail in relation to claims 67 and 70–76, we determine that Petitioner has established by a preponderance of the evidence that challenged claims 81, 83–85, and 96 are not directed to patent-eligible subject matter and, therefore, are unpatentable under 35 U.S.C. § 101.

5. Conclusion

For the foregoing reasons, we determine that Petitioner has demonstrated by a preponderance of the evidence that claims 52, 62, 67, 70–76, 81, 83–85, and 96 of the '538 patent are unpatentable under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

D. Patent Owner's Motion to Exclude Evidence

The party moving to exclude evidence bears the burden of proof to establish that it is entitled to the relief requested, e.g., that the material sought to be excluded is inadmissible under the Federal Rules of Evidence (“F.R.E”). *See* 37 C.F.R. §§ 42.20(c), 42.62(a).

Petitioner moves to exclude Petitioner's Exhibits “1006 (¶¶ 16-28, 39-40, 42, 77, and 88 only), 1010, 1011, 1012, 1013, 1014, 1016, 1017, 1018, 1020, 1021, 1022, 1023, 1024, 1025, 1026, 1027, and 1028 for failing to meet the admissibility requirements of the Federal Rules of Evidence.”

Motion to Exclude 1.

In relation to certain paragraphs in Exhibit 1006, Dr. Siegel's Declaration, Patent Owner asserts that Dr. Siegel has admitted that he is not an expert in the history of inventory management and, therefore, according to Patent Owner, his testimony in this regard is inadmissible under F.R.E. 702 and 703. *Id.* at 1–7. Petitioner also moves to exclude other evidence cited in the Petition (Ex. 1010–1014 and 1016–1018) as inadmissible

hearsay under F.R.E. 801 and 802 because Dr. Siegel relied on those exhibits in his testimony regarding the history of inventory management. *Id.* at 8–9.

As a general matter, we do not rely on many aspects of Dr. Siegel’s Declaration, nor evidence he cites in support, as it relates to the “ancient” history of inventory management. Motion to Exclude 3. Thus, in relation to Patent Owner’s points in this regard, we dismiss the Motion to Exclude as moot.

As discussed above, however, we are satisfied that Dr. Siegel possesses sufficient qualifications to testify on matters that are relevant to our analysis here, including in some of the paragraphs Patent Owner asks us to exclude. *See* Ex. 1006 ¶¶ 3–11 (discussing Dr. Siegel’s expertise and experience in information technology, computer science, finance, and inventory management). For example, as noted above, Dr. Siegel testifies that relevant aspects of automated inventory management and VMI were well known before the priority date of the ’538 patent. *Id.* at ¶¶ 25–28 (citing Ex. 1018); Ex. 1027 ¶¶ 5–22 (citing Exs. 1020-1022, 1024, 1025). Dr. Siegel also testifies that the ’538 patent specification describes hardware and software that “require only generic computer implementation—not specialized hardware or software.” Ex. 1006 ¶¶ 43–54, 78–79, 89. In addition, Dr. Siegel discuss general concepts of inventory management using a computer, and whether certain limitations of the challenged claims can be performed mentally, using pen and paper, or manually, without use of a computer. *Id.* at ¶¶ 40, 58–66, 80, 90. We decline to exclude any such paragraphs in Exhibit 1006, nor the cited exhibits therein.

Patent Owner also moves to exclude Exhibits 1020-1022, 1024, 1026, and 1028 under F.R.E. 401 and F.R.E. 403. Motion to Exclude 9–11. Patent Owner contends that Petitioner relies on those exhibits in its Reply, or Dr. Siegel relies upon them in his Supplemental Declaration (Ex. 1027) submitted with Petitioner’s Reply. *Id.* Patent Owner contends that the exhibits correspond to “a belated attempt to make out [Petitioner’s] *prima facie* case,” rather than properly respond to Patent Owner’s Response. *Id.* Patent Owner also moves to exclude Dr. Siegel’s Supplemental Declaration (Ex. 1027) in its entirety under F.R.E. 401, 403, 702, and 703, again arguing that it is “an improper reply attempting to belatedly remedy the deficiencies in the petition.” Motion to Exclude 11–13. For the same reason, Patent Owner also moves to exclude Exhibit 1025 “purportedly related to vendor-managed inventory (‘VMI’).” *Id.* at 13–14.²

Normally, a motion to exclude is available to parties to explain why certain evidence is inadmissible, and is not the proper place to raise arguments regarding the scope of a reply. Office Patent Trial Practice Guide, 77 Fed. Reg. 48756, 48767 (Aug. 14, 2012); *Liberty Mutual Insurance Co. v. Progressive Casualty Insurance Co.*, Case No. CBM2012-00002, Paper 66, slip op. at 62 (PTAB Jan. 23, 2014) (stating that a motion to exclude “is not a mechanism to argue that a reply contains new arguments

² Patent Owner raises similar points in relation to “wait[ing] until the reply stage to present” certain testimony by Dr. Siegel in its Motion for Observation on Cross Examination of Dr. Siegel. Mot. Obs. 1–2. We acknowledge that Patent Owner raises other points in that Motion in relation to the deposition testimony of Dr. Siegel (Ex. 2020) taken in relation to his Supplemental Declaration (Ex. 1027). Our consideration of Patent Owner’s Motion for Observation does not alter our Decision here.

or relies on evidence necessary to make out a prima facie case”). That said, we address the points raised in the Motion to Exclude to clarify the issues raised therein.

We are persuaded that Dr. Siegel’s Supplemental Declaration, and evidence he cites therein, is sufficiently responsive to Patent Owner’s Response, such that we decline to exclude or disregard that evidence altogether. For example, Petitioner’s Reply cites to Dr. Siegel’s Supplemental Declaration to support its response to what it alleges to be “multiple incorrect” statements by Patent Owner regarding the state of the art as of the ’538 patent’s priority date. Reply 3–4. Petitioner also responds to Patent Owner’s assertions and testimony by its expert, Dr. Thomas (Ex. 2005), regarding limitations in the challenged claims reciting “access” based on assigned “permissions or roles.” PO Resp. 10, 26–27, 29–30, 45–46, 54; Reply 4–8, 19, 24–25. We are persuaded that Petitioner sufficiently addresses those claim limitations in the Petition (Pet. 50–52) and does not raise arguments in that regard wholesale for the first time in the Reply.

Patent Owner also moves to exclude Exhibit 1023, as Petitioner did not cite or discuss it in its Reply or in Dr. Siegel’s Supplemental Declaration. We do not rely on this exhibit for the purposes of this Decision and, therefore, dismiss this aspect of Patent Owner’s Motion to Exclude as moot.

E. Patent Owner’s Motion to Strike Portions of Petitioner’s Reply

As authorized by the panel (Paper 21), Patent Owner filed a two-page paper “calling the Board’s attention to those portions of Petitioner’s Reply that Patent Owner believes raise new issues or belatedly present new evidence.” Motion to Strike 1. This paper repeats many of the points raised

in Patent Owner's Motion to Exclude. We are not persuaded to strike any portions of Petitioner's Reply. As discussed above, as relevant to portions of the Reply we rely on in making our Decision here, we are persuaded that Petitioner properly responds to arguments and evidence relied upon in Patent Owner's Response. *See also* Paper 32 (outlining how Petitioner responds to Patent Owner's Response in cited portions of its Reply, after raising the matter initially in the Petition).

III. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 52, 62, 67, 70–76, 81, 83–85, and 96 of U.S. Patent No. 6,996,538 B2/C1 are *unpatentable*;

FURTHER ORDERED that Patent Owner's Motion to Exclude Evidence is *denied-in-part and dismissed-in-part*;

FURTHER ORDERED that Patent Owner's Motion to Strike Portions of Petitioner's Reply is *denied*; and

FURTHER ORDERED that, because this is a final written decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

CBM2015-00037
Patent 6,996,538 B2/C1

PETITIONER:

Michael L. Kiklis
Katherine D. Cappaert
OBLON, MCCCELLAND, MAIER & NEUSTADT, LLP
cpdocketkiklis@oblon.com
cpdocketcappaert@oblon.com

PATENT OWNER:

Richard Torczon
Matthew A. Argenti
Michael T. Rosato
WILSON SONSINI GOODRICH & ROSATI
rtorczon@wsgr.com
margenti@wsgr.com
mrosato@wsgr.com