

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAP AMERICA, INC.,
Petitioner,

v.

LAKSHMI ARUNACHALAM,
Patent Owner.

Case CBM2016-00081
Patent 7,340,506 C1

Before KEVIN F. TURNER, JENNIFER S. BISK, and
GEORGIANNA W. BRADEN, *Administrative Patent Judges*.

TURNER, *Administrative Patent Judge*.

DECISION
Final Written Decision
35 U.S.C. § 328(a) and 37 C.F.R. §§ 42.73

I. INTRODUCTION

This covered business method patent review, instituted pursuant to 35 U.S.C. § 324, challenges the patentability of claims 20 and 21 of U.S. Patent No. 7,340,506 C1 (Ex. 1001, “the ’506 Patent”), owned by Dr. Lakshmi Arunachalam (“Patent Owner”). We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is entered pursuant to 35 U.S.C. § 328(a) and 37 C.F.R. § 42.73.

For the reasons discussed below, Petitioner has shown by a preponderance of the evidence that claims 20 and 21 of the ’506 Patent are unpatentable. We also determine that Patent Owner has not met regulatory requirements under 37 C.F.R. § 42.221(a) or (b)(1), or statutory requirements of 35 U.S.C. § 326(d)(1)(B) or (3), in its Motion to Amend in relation to proposed new claims, and thus, we deny the Motion to Amend.

We note that a Grant of Good Cause Extension, under 35 U.S.C. § 316(a)(11) and 37 C.F.R. § 42.100(c), was made by the Chief Administrative Patent Judge, extending the one-year period for issuing a Final Written Decision, and we extended the time to administer the present proceeding by up to six months. Papers 26, 27.

A. Procedural History

SAP America, Inc. (“Petitioner”) filed a Petition requesting a review under the transitional program for covered business method patents of the ’506 Patent. Paper 2 (“Pet.”). Patent Owner sought to file a Preliminary Response, but did not file such a paper, because we denied an extension of the due date for that paper, as discussed below.

Before institution of this proceeding, we conducted a conference call with Petitioner and Patent Owner to discuss potential motions that Patent Owner wished to have authorized for filing and considered. Patent Owner moved to file a Motion for Extension of Time to file Patent Owner's Preliminary Response, to which Petitioner opposed. Paper 6, 3. On the call, we indicated that the Board found previously that there was "no need or justification to extend the current due date of August 20, 2016 for Patent Owner's Preliminary Response" (Paper 4, 3), and we declined to authorize Patent Owner's Motion. Also, on that same call, we authorized Patent Owner's motion to disqualify attorneys representing Petitioner, along with an opposition to be filed by Petitioner. Following an analysis of the briefing, we denied Patent Owner's Motion. *See* Paper 12.

We instituted a review under the transitional program for covered business method patents of claims 20 and 21 ("the instituted claims") of the '506 Patent as unpatentable under 35 U.S.C. §§ 101, 103¹, on the following bases. Paper 10 ("Institution Decision" or "Dec.").

¹ The Leahy-Smith America Invents Act ("AIA"), Pub. L. No. 112-29, 125 Stat. 284, 287–88 (2011), revised 35 U.S.C. § 103, effective March 16, 2013. Because the challenged patent was filed before March 16, 2013, we refer to the pre-AIA version of § 103 in this Decision.

References	Basis	Claims Challenged
	§ 101	20 and 21
Lawlor ² and CORBA ³	§ 103	20
Lawlor, CORBA, and Billings ⁴	§ 103	21

Dec. 23.

Subsequent to institution, Patent Owner filed a Patent Owner Response to the Petition (Paper 14, “PO Resp.”) and a Motion to Amend (Paper 15, “Mot. Amend”). Petitioner filed a Reply to Patent Owner’s Response (Paper 19, “Reply”) and an Opposition to Patent Owner’s Motion to Amend (Paper 18, “Opp.”). Patent Owner then filed a Reply to Petitioner’s Opposition to Patent Owner’s Motion to Amend (Paper 22, “PO Reply”).

Petitioner also filed Objections to Patent Owner’s Evidence (Paper 16), pertaining to Exhibits 2005 and 2006, to which Patent Owner filed an Opposition (Paper 17).

Petitioner filed a Notice regarding oral argument (Paper 23) indicating that Petitioner did not believe that oral argument was necessary in the instant proceeding, and Patent Owner did not file a request for oral argument. The panel determined that no oral argument was warranted to render this decision. *See* Paper 24.

² U.S. Patent No. 5,220,501, issued Jun. 15, 1993 (Ex. 1004, “Lawlor”).

³ T.J. Mowbray and R. Zahavi, *The Essential CORBA: Systems Integration Using Distributed Objects* (John Wiley & Sons, Inc. 1995) (Ex. 1005, “CORBA”).

⁴ U.S. Patent No. 4,714,989, issued Dec. 22, 1987 (Ex. 1006, “Billings”).

C. Related Matters

Petitioner contends that the '506 Patent is the subject of multiple pending and prior proceedings that are relevant. Pet. 3. These include: *Arunachalam v. International Business Machines Corporation, et. al.*, Case No. 16-cv-00281-RGA (D. Del.); *Arunachalam v. Citizens Financial Group, Inc.*, C.A. No. 1:12-cv-355-RGA (D. Del.); *Pi-Net International, Inc., v. JPMorgan Chase & Co.*, No. 1:12-cv-00282-RGA (D. Del.); *Arunachalam v. Kronos*, C.A. No. 1-14-cv-00091-RGA (D. Del.); *Arunachalam v. Citi Group, Inc. et al*, C.A. No. 1:14-cv-00373-RGA (D. Del.); *Arunachalam v. Wells Fargo Bank, N.A.*, C.A. No 1:13-cv-01812-RGA (D. Del.); *SAP America, Inc. v. Arunachalam*, Case 4:13-cv-01248-PJH (N.D. Cal.); *Pi-Net International, Inc. v. JC Penney Co., Inc.*, 2:13-cv-01035-JRG-RSP/2:13-cv-01016-JRG-RSP (E.D. Tex.); *Arunachalam v. United States of America*, No. 1-16-cv-00358 (Fed. Cl.). Pet. 3; Paper 5, 2 (Patent Owner's Mandatory Notice).

The following patents also are indicated as being related to '506 Patent and involved in the above cited proceedings: U.S. Patent No. 8,108,492, U.S. Patent No. 5,987,500, U.S. Patent No. 8,037,158, and U.S. Patent No. 8,346,894. These latter patents were the subject of the following nine post-grant proceedings:

Proceeding	Patent No.	Disposition
IPR2013-00194	8,108,492	Final Written Decision
IPR2013-00195	5,987,500	Final Written Decision
CBM2013-00013	8,037,158	Final Written Decision
IPR2014-00413	8,346,894	Final Written Decision

IPR2014-00414	8,346,894	Final Written Decision
CBM2014-00018	8,037,158	Final Written Decision
CBM2014-00101	8,346,894	Trial Denied
CBM2014-00097	8,346,894	Trial Denied
CBM2014-00089	8,346,894	Trial Denied

D. The '506 Patent

The '506 Patent relates to providing “a method and apparatus for providing real-time, two-way transactional capabilities on the network, including heterogeneous networks such as the Internet, World Wide Web (WWW), telephone network, wireless networks, cable television networks, and private enterprise networks.” Ex. 1001, 2:51–55. Figure 5D is reproduced below:

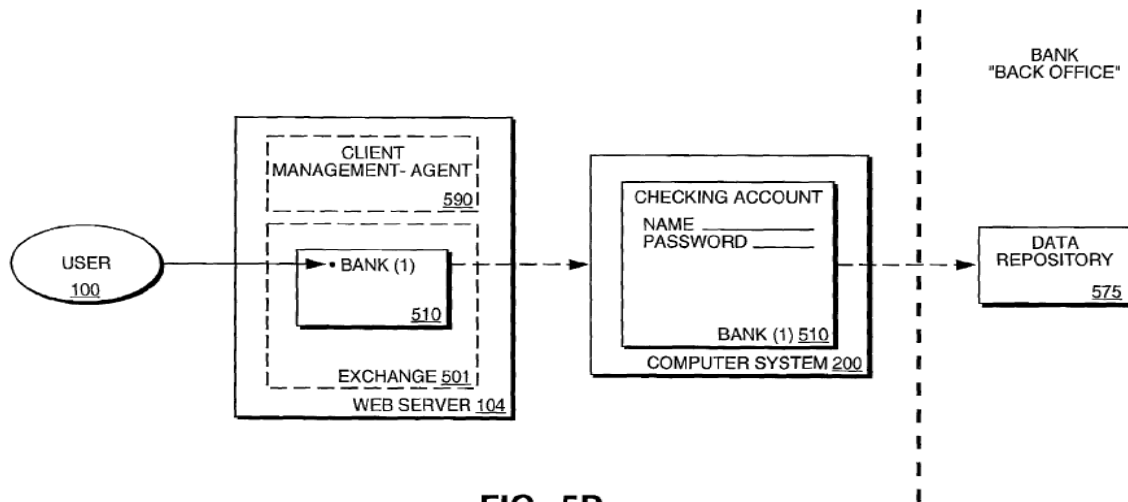


FIG. 5D

As illustrated in Figure 5D, user 100 communicates with a merchant at a server via software such as a Web browser. *Id.* at 7:25–31. Exchange 501 is shown as running on a different computer system (network server 104) from the computer systems of the network merchants or content owners

running POSvc [point of service] applications (computer system 200). *Id.* Exchange 501 may, however, also be on the same computer system as one or more of the computer systems of the network merchants. *Id.* The “Back End” represents a Bank “Back Office,” in which “user 100 will be able to connect to Bank services and utilize the application to perform banking transactions, thus accessing data from a host or data repository 575 in the Bank ‘Back Office.’” *Id.* at 7:33–36.

The ’506 Patent describes a configurable value-added network switching and object routing method and apparatus, with an exchange having point of service applications 510 and value added network (VAN) switch 520. *Id.* at 9:19–20, Fig. 5B. VAN switch 520 includes boundary service 701, switching service 702, management service 703, and application service 704. *Id.* at Fig. 7. Boundary service 701 “provides the interface to the on-line service provider,” specifically between VAN switch 520, the Internet and the network, telephone companies, wireless systems, cable television networks, and multi-media end user devices such as PCs, televisions or telephones. *Id.* at 9:21–27. Switching service 702 routes user connections to specific software modules, multiplexes and prioritizes requests, and facilitates access to financial networks (*e.g.*, banking networks) using the Internet. *Id.* at 9:36–39. Management service 703 includes tools that are “used by the end users to manage network resources.” *Id.* at 9:45–46. Application service 704 “includes POSvc [point of service] applications.” *Id.* at 9:56–57.

Figure 8 of the ’506 Patent provides a flow diagram in which the user

first connects to a Web server and issues a request for a transactional application. *Id.* at 10:4–7. An “exchange” then presents the user with a list of applications and, in response to the user’s selection, switches the user to the selected application. *Id.* at 10:9–14. An “object routing component” then executes the user’s request. *Id.* at 10:14–15.

E. Subject Claims

Petitioner challenges claims 20 and 21 of the ’506 Patent. Pet. 1. Claims 20 and 21 are dependent on claim 14, where claim 14 was cancelled as a result of reexamination. Ex. 1001, *Inter Partes* Reexamination Certificate 1:17. Claims 14, 20, and 21 are reproduced below.

14. An apparatus for providing a service over a digital network, the apparatus comprising:
a processor;
a machine-readable storage device including one or more instructions executable by the processor for
sending first display information from a first computer system to a user device, wherein the first display information includes a control associated with a commercial service;
accepting a first signal in response to a user input to activate the control; and
initiating, in response to the first signal, communication between the user device and a second computer system, wherein the second computer system acts to send second display information to the user device, wherein the second display information includes a list of at least one commercial service; wherein the second computer system further acts to accept a second signal in response to a user input to select a commercial service from the list; and to complete a commercial transaction relating to the selected commercial service;

associating an object identity with information entries and attributes, wherein the object identity represents a networked object;
storing said information entries and said attributes in a virtual information store; and
assigning a unique network address to said object identity.

20. The apparatus of claim 14, wherein the transaction is handed over to an exchange, wherein the exchange manages the connection between the user and the commercial service, wherein the commercial service is an online service operating across the digital network, wherein the digital network is a value-added service network atop the Web.

21. The apparatus of claim 14, wherein the first computer system offering the commercial service comprising access to employee payroll information on a service network atop the Web.

Ex. 1001, 32:20–47, *Inter Partes* Reexamination Certificate 1:20–29.

II. DISCUSSION

A. *Claim Construction*

The claims of an unexpired patent are interpreted using the broadest reasonable interpretation in light of the specification of the patent in which they appear. *See* 37 C.F.R. § 42.300(b); *Cuozzo Speed Techs. LLC v. Lee*, 136 S. Ct. 2131 (2016) (upholding the use of broadest reasonable construction standard). Consistent with the broadest reasonable construction standard, claim terms are presumed to have their ordinary and customary meaning as understood by one of ordinary skill in the art in the context of the entire patent disclosure at the time of the invention. *In re Translogic*

Tech., Inc., 504 F.3d 1249, 1257 (Fed. Cir. 2007). An inventor may provide a meaning for a term that is different from its ordinary meaning by defining the term in the specification with “reasonable clarity, deliberateness, and precision.” *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). Moreover, limitations are not to be read from the specification into the claims. *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993). In addition, the Board may not “construe claims during [an *inter partes* review] so broadly that its constructions are unreasonable under general claim construction principles.” *Microsoft Corp. v. Proxyconn, Inc.*, 789 F.3d 1292, 1298 (Fed. Cir. 2015). We construe the challenged claims according to these principles.

In the Petition, Petitioner proposes relevant claim constructions from the *inter partes* reexamination of the ’506 patent and the other post-grant proceedings, discussed in Section I.C., which were adopted by the Office. Pet. 10–14. Petitioner also asserts that the claim term “commercial service” should be construed as “a service involving the buying and selling of goods.” *Id.* at 14. We have reviewed Petitioner’s proposed constructions and find they are consistent with prior Board findings and the broadest reasonable construction standard.

In the Institution Decision, we determined that the indicated claim limitations should be construed as follows:

Claim Limitation	Claim Construction
“control”	“a component or mechanism that regulates or guides the operation of an apparatus or system”

Claim Limitation	Claim Construction
“object identity”	“characteristic by which an object is recognized or known; a characteristic by which an object is recognized or known, including a name given to an object specifying an object type or its identity (e.g., ID) for an object”
“networked object”	“an object that operates within a network or transmitted over a network”
“virtual information store”	“an information store in which information entries and attributes are associated with a networked object identity”
“commercial service”	“a service involving the buying and selling of goods”

Patent Owner argues that we failed to consider “key terms” and disputes constructions adopted for the Institution Decision. PO Resp. 35–74. We address each disputed claim term below.

Patent Owner also argues that we did not construe “individual networked object,” and that we “willfully left out ‘Individual’ and only construed ‘Network Object.’” PO Resp. 36. Patent Owner is correct that we did not construe “individual networked object.” The reason is that it is not a term recited in the challenged claims, nor claim 14, from which the challenged claims depend. We construed “networked object,” i.e., without “individual,” because it is a term recited in the claims. Patent Owner also argues that the proper construction of “networked object” is “the information entries and attributes in a DOLSIB [distributed on-line service information base].” *Id.* (citing Ex. 1001, 8:50–54). We do not agree. Although the specification of the ’506 Patent details that “[t]he networked object identity

identifies the information entries and attributes in the DOLSIB as individual networked objects,” that is not a definition of “network objects.” We continue to find that the broadest reasonable construction, in view of the specification, of “networked object” is “an object that operates within a network or transmitted over a network.” We are not persuaded that “individual networked object” need be construed because it is not a claim term, and we are not persuaded that every recitation of “networked object” must refer to an “individual networked object.”

Patent Owner argues that we did not construe the claim term “attributes,” which should be understood as “characteristics of an object.” *Id.* at 36–37 (citing Ex. 1001, 4:45–58, 23:19–25). Petitioner counters that the passages cited by Patent Owner do not support the proffered definition, because those passages do not contain the word “attribute.” Pet. Reply 4. Although Patent Owner’s construction is not unreasonable, claim 14 already recites that the step of “associating an object identity with information entries and attributes,” so that “attributes” need not be referred to as “characteristics of an object,” since such an association is already directly recited in the claims. As such, we are not persuaded that the claim term “attributes” needs explicit construction.

Similarly, Patent Owner argues that “information entries” should be construed as “values of the characteristics of an object.” PO Resp. 37 (citing Ex. 1001, 4:45–58, 23:19–25). Again, we find it unnecessary to tie “information entries” to an object, since the association is already provided

in claim 14. Therefore, we are not persuaded that the claim term “information entries” needs explicit construction.

With respect to the claim term “virtual information store,” we construed that term as “an information store in which information entries and attributes are associated with a networked object identity,” as discussed above. Patent Owner argues that we have not given proper effect to the word “virtual,” arguing that the proper construction is “a transient information store that is temporarily created and which contains information entries and attributes associated with a networked object identity.” PO Resp. 39–41. Patent Owner cites to the specification of the ’506 Patent (Ex. 1001, 3:1–5, 8:47–54), and “[t]he IBM Computer Dictionary” (*id.*), but, as Petitioner points out, Patent Owner has not “submitted this dictionary as an exhibit or provided any further information to locate the dictionary.” Further, the sections of the ’506 Patent cited by Patent Owner are not explicit about the store being “transient” or “temporarily created;” this is an inference drawn by Patent Owner. See PO Resp. 40. The introduction of the terms “transient” and “temporarily” to the construction adds more ambiguity to the claim term because the specification of the ’506 Patent does not discuss how long any “virtual information store” would be stored or maintained. In addition, we are not persuaded that Patent Owner’s provision of affirmatively containing the information entries and attributes is necessary because having a store in which the information entries and attributes are associated with a networked object identity would have been understood by ordinarily skilled artisans as being a store containing those elements.

Therefore, we are not persuaded that the claim term “virtual information store” requires a different construction and we maintain the construction provided in the Institution Decision, which is reproduced above.

Patent Owner argues that the construction of “service” is “an application” or “value-added network application” or “VAN service” or “Point-of-Service (POSvc) application.” PO Resp. 41–44 (citing Ex. 1001, 2:10, 6:49–55, 7:6–24, 32–41, 6:45–8:20, 9:56–58, Figs. 6A, 5B–5D). We are persuaded, however, as Petitioner argues, that these are listed embodiments from the specification and that the claim language cannot be limited to these particular embodiments. Pet. Reply 6–7 (citing *SuperGuide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004)). In addition, Petitioner points out that the cited sections of the specification refer to both applications and services, to which a differentiated service should not apply. Therefore, we are not persuaded that the claim term “service” needs explicit construction.

With respect to “commercial service,” Patent Owner argues that our adopted construction is “too narrow,” and the proper construction is “an application [or value-added network application or VAN service or Point-of-Service (POSvc) application] provided by a Web merchant offered as an online service on the Web.” PO Resp. 44–46 (citing Ex. 1001, 5:57–6:35, Fig. 4B). We concur with Petitioner that Patent Owner’s proffered construction is actually narrower than that adopted by the Institution Decision, and merely refers to embodiments disclosed in the specification. Pet. Reply 7–8. As discussed above, we are persuaded that the specification

of the '506 Patent differentiates between services and applications. As well, claim 20 makes explicit that “the commercial service is an online service operating across the digital network,” such that the provision of “a Web merchant offered as an online service on the Web” in the construction is unnecessary. Therefore, we are not persuaded that the claim term “commercial service” requires a different construction and we maintain the construction provided in the Institution Decision, which is reproduced above.

We construed “object identity” as identified above, but Patent Owner argues that this construction is not consistent with the disclosures of the specification or prosecution histories, and instead urges a construction of “information entries and attributes that represent a networked object, that are the argument parameters for object serialization of the data onto a network stream, for the parameters and the object that are routed on the World Wide Web, and needed to transfer data between computers.” PO Resp. 48–49 (citing Ex. 1001, 8:50–54, 11:65–12:2, 12:12–16, 13:2–5). We do not agree with Patent Owner’s proposed construction, and we agree with Petitioner that the specification of the '506 Patent does not provide a clear definition and Patent Owner’s citations to specific embodiments does not contribute to the broadest reasonable construction. Pet. Reply 8–9. Therefore, we are not persuaded that the claim term “object identity” requires a different construction and we maintain the construction provided in the Institution Decision, which is reproduced above.

With respect to “control,” we construed that claim term as “a component or mechanism that regulates or guides the operation of an apparatus or system,” as noted above. Patent Owner argues that the adopted construction is not consistent with the specification. PO Resp. 49–50. Patent Owner counters that a proper construction to be “distributed management of a service network, operating within the boundaries of an IP-based facilities network.” *Id.* (citing Ex. 1001, 6:64–66, 7:38–39). Petitioner responds that the cited sections describe a potential function of an exchange, and not a control, and also points out that we have previously determined that “the distributed control is not described as ‘first display information,’” in claim 14. Pet. Reply 9–10 (citing Ex. 1007, 11–12). We agree with Petitioner and we are not persuaded that the previous construction should be disturbed.

With “service network atop the Web” and “value-added service network atop the Web,” Patent Owner argues that we construed them, in a related case, as “a network on which services other than underlying network communications services are provided over the internet.” PO Resp. 50. Patent Owner contends that they should be construed as follows:

Claim Limitation	Claim Construction
“service network atop the Web”	“an OSI application layer network that comprises a POSvc application displayed on a Web page offered as an online service over the Web.”

Claim Limitation	Claim Construction
“value-added service network atop the Web”	“an OSI application layer network that provides a value-added network application or a POSvc application displayed on a Web page offered as an online service over the Web.”

Id. at 50–51 (citing Ex. 1001, 6:17–23, 31–34, 48–50, 7:10–16). Patent Owner argues that being “atop the World Wide Web” specifies that the service network operates in a specific layer of the OSI model, and is critical to the invention. *Id.* at 51–52 (citing Ex. 1001, 5:22–24, 52–54).

In response, Petitioner argues that Patent Owner is attempting to rely on particular embodiments from the ’506 Patent specification to support its construction, which is improper. Pet. Reply 10 (citing *SuperGuide*, 358 F.3d at 875). Petitioner also points out that the ’506 Patent specification does not provide clear definitions of the cited claim terms, but rather provide “example implementation details that do not appear in the challenged claims.” *Id.* at 11. We agree with Petitioner, and further construe a “service network atop the Web” as “a network on which services other than underlying network communications services are provided using the Web,” per our prior construction and Petitioner’s suggestion. *Id.* (citing Ex. 1002 ¶ 121; Pet. 66–67).

Patent Owner also argues we “fraudulently avoided construing this **key** term,” i.e., “exchange,” and that the proper construction is “a Web page; Point-of-Service (POSvc) applications; switching component, the VAN switch; object routing component, the object router; and service management component; creates and allows for the management (or

distributed control) of a service network, operating within the boundaries of an IP-based facilities network; processes the consumer/Web user's request; and manages the connection between the Web user and Web merchant services.” PO Resp. 53 (citing Ex. 1001, 6:48–7:40; Figs. 5B, 5D; emphasis in original).

Petitioner points out, however, that the ’506 Patent specification makes clear that the exchange component in Fig. 5B is “according to one embodiment,” and should not be read into the claim limitation. Pet. Reply 12 (citing Ex. 1001 3:31–32; *Akamai Tech., Inc. v. Limelight Networks, Inc.*, 805 F.3d 1368, 1376 (Fed. Cir. 2015)). In addition, Petitioner also points to claim 20, which on its own defines exchange according to “wherein the exchange manages the connection between the user and the commercial service,” such that additional explicit construction is unnecessary. *Id.* We agree with Petitioner that “exchange” does not require an explicit construction in the context of the instant decision.

Patent Owner further argues constructions for the following terms: “Distributed on-line service information base or DOLSIB,” “state,” “Web transaction or transition,” “event,” “action,” “Extended Finite State Machine (EFSM),” “Web merchant,” “Facilities network,” “VAN Switch or Value-Added Network (VAN) Switch,” “Value-Added Network (VAN),” “Web application,” “Object Routing” and “Point-of-Service (POSvc) Application.” PO Resp. 35–36, 37–41, 46–48, 52–74. These terms, however, are not recited in challenged claims 20, and 21, nor claim 14, from which those claims depend. Therefore, although those terms may have been construed in

other proceedings, they need not be construed herein. For example, Patent Owner argues about the proper meaning of “event” (PO Resp. 38), arguing it is a “key term,” but that term is not found in claims 14, 20, or 21. As such, we need not consider the construction of “event,” in determining the patentability of claims 20 and 21. Therefore, we are persuaded that terms not recited in the claims need not receive specific construction.

B. Standing to Seek Covered Business Method Patent Review

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 charged with infringement of at least one claim of the ’506 Patent, as identified in Section I.C. above. Pet. 15–17.

A CBM 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); *see also* 37 C.F.R. § 42.301 (defining “[c]overed business method patent” and “[t]echnological invention”). To determine whether a

patent is eligible for a covered business method patent review, the focus is on the claims. *Secure Access, LLC v. PNC Bank N.A.*, 848 F.3d 1370, 1379 (Fed. Cir. 2017) (“It is the claims, in the traditional patent law sense, properly understood in light of the written description, that identifies a CBM patent.”). One claim directed to a CBM is sufficient to render the patent eligible for CBM patent review. *See id.* at 1381 (“[T]he statutory definition of a CBM patent requires that the patent have a claim that contains, however phrased, a financial activity element.”).

In our Institution Decision, we determined that the Petitioner had shown that the ’506 Patent is a CBM eligible patent. Inst. Dec. 9–11. Patent Owner urges us to reconsider our determination and find that the ’506 Patent is not eligible for CBM review. *See* PO Resp. 17–27. We, however, are not apprised of any sufficient reason to change our original determination as discussed below.

i. Financial Product or Service

The statute defines a “covered business method patent” as “[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.” AIA § 18(d)(1); *see* 37 C.F.R. § 42.301(a). A covered business method patent can be broadly interpreted to encompass patents claiming activities that are financial in nature. Transitional Program for Covered Business Method Patents—Definitions of Covered Business Method Patent and Technological Invention, 77 Fed. Reg. 48734, 48735 (Aug. 14, 2012); *Blue Calypso, LLC*

v. Groupon, Inc., 815 F.3d 1331, 1338–41 (Fed. Cir. 2016) (determining that a patent was a covered business method patent because it claimed activities that are financial in nature); *Unwired Planet, LLC v. Google, Inc.*, 841 F.3d 1376, n. 5 (Fed. Cir. 2016) (stating that “we endorsed the ‘financial in nature’ portion of the standard as consistent with the statutory definition of ‘covered business method patent’ in *Blue Calypso*”), *Versata Development Group, Inc. v. SAP America, Inc.*, 793 F.3d 1306, 1324–25 (Fed. Cir. 2015) (“[The statute] on its face covers a wide range of finance-related activities.”).

Petitioner asserts that the sole remaining claims of the ’506 Patent claims recite a “commercial service,” which involves the buying and selling of goods. Pet. 18–19. Petitioner also points out that claim 21 recites the limitation of “the commercial service comprising access to employee payroll information,” where the “[p]ayment of employees is also a financial product or service and inherently involves the movement of money.” *Id.* at 19. Although Patent Owner disputes that the ’506 Patent is directed to a covered business method patent (PO Resp. 17–27), Patent Owner does not appear to dispute that claim 21 is directed to a financial product or service.

As such, we are persuaded by Petitioner that at least one claim claims a method for performing data processing or other operations used in the practice, administration, or management of a financial product or service, namely claim 21. As Petitioner argues, the payment of employees is a financial product or service. Upon this record, we determine that Petitioner has established that at least one claim recites a method directed to a financial

product or service sufficient to meet a criterion for instituting a covered business method patent review.

ii. Technological Invention

Even if a patent includes claims that would otherwise be eligible for treatment as a covered business method, review of the patent is precluded if the claims cover only “technological invention[s],” as defined by 37 C.F.R. § 42.301(b). 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. *See Versata*, 793 F.3d at 1326–7; *Apple Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016). 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.

77 Fed. Reg. 48,756, 48,763–64 (Aug. 14, 2012). The Federal Circuit has held that a claim does not include a “technological feature” if its “elements are nothing more than general computer system components used to carry out the claimed process.” *Blue Calypso*, 815 F.3d at 1341; *see also Versata*, 793 F.3d at 1327 (“the presence of a general purpose computer to facilitate operations through un inventive steps does not change the fundamental character of an invention”).

Petitioner argues that the ’506 Patent is not for a technological invention because none of the claims recite a technological feature that is novel and nonobvious over the prior art. Pet. 20–27. Petitioner, further, argues that the ’506 Patent is not for a technological invention because none of the claims solve a technical problem using a technical solution. *Id.* at 27–28. According to Petitioner, all of the items recited in the claims, namely “a processor” and “a machine-readable storage device,” are directed to generic, well-known components when the ’506 Patent application was filed. *Id.* at 20–21. Petitioner also discusses prior art applied against the claims in the *inter partes* reexamination of the ’506 patent, and alleges that claims 20 and 21 do not recite anything novel or unobvious. *Id.* at 21–27.

Patent Owner argues that the “definition of a ‘technological invention’ [under Rule 301(b)] could not fit claims 20 and 21 more perfectly.” PO Resp. 18. Patent Owner also argues that the prior art was “distinguished specifically based upon several technological distinctions in claims 20 and 21.” *Id.* Patent Owner points to claim language of claim 14, specifically, “the transaction is handed over to an exchange, wherein the exchange

manages the connection between the user and the commercial service, . . . operating across . . . a value-added service network atop the Web,” relying on its construction of “exchange.” As discussed above in Section II.A, however, we are not persuaded to adopt this construction. Patent Owner also argues that completing a commercial transaction specifically related to the selected commercial service, based on its construction of “service,” provides a technological feature and solution. *Id.* at 19–20, 21–22. Similarly, this is not persuasive because we have not adopted Patent Owner’s construction of “service.” We find equally unpersuasive Patent Owner’s arguments relying on its construction of “control,” which we did not adopt. *See id.* at 22. Patent Owner also references a “technological problem” addressed in the ’506 Patent specification, but does not tie that discussion to any element of claims 14, 20, or 21. *Id.* at 20–21, 23.

Patent Owner then argues that the ’506 Patent is not classified in class 705, further demonstrating that claims 20 and 21 are not subject to CBM review as defined by the Definitions of Covered Business Method Patent And Technological Invention. *Id.* at 24–25 (citing 77 Fed. Reg. 48734 at 48739). We are not persuaded, however, because, as quoted, the Federal Register indicate that such patents “are anticipated *to be typically* classifiable in class 705.” (emphasis added). As such, the classification of the ’506 Patent is not necessarily determinative. As Petitioner points out, “as the Federal Register also acknowledges that ‘some offending business method patents are issued in other sections.’” Pet. Reply 16 (citing 77 Fed. Reg. at 48736).

We are persuaded by Petitioner that the '506 Patent is not for a technological invention because at least claim 21 does not satisfy the first prong of the test. Claim 21 does not recite a technological feature that is novel or unobvious over the prior art. Claim 21 recites, in part, “access to employee payroll information on a service network atop the Web,” such that access to such information over any type of network was well-known, as demonstrated by Billings, as discussed below. Therefore, we find that at least claim 21 does not recite a technological feature that is novel or unobvious over the prior art and does not satisfy the first prong of the test.

For the reasons discussed above, we are persuaded by Petitioner that the '506 Patent is eligible for covered business method patent review.

C. Principles of Law

To prevail in challenging Patent Owner's claims, Petitioner must demonstrate by a preponderance of the evidence that the claims are unpatentable. 35 U.S.C. § 326(e); 37 C.F.R. § 42.1(d). “In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). This burden never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (citing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1326–27 (Fed. Cir. 2008)) (discussing the burden of proof in *inter partes*

review). Furthermore, Petitioner cannot satisfy its burden of proving obviousness by employing “mere conclusory statements.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

Petitioner has asserted each of the challenged claims in the ’506 Patent is unpatentable under 35 U.S.C. § 101. For claimed subject matter to be patentable 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. The Supreme Court recognizes three categories of subject matter that are ineligible for patent protection: “laws of nature, physical phenomena, and abstract ideas.” *Bilski v. Kappos*, 130 S.Ct. 3218, 3225 (2010) (citation omitted). A law of nature or an abstract idea by itself is not patentable; however, 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 Corp. Pty, Ltd. v. CLS Bank Int’l*, 134 S.Ct. 2347 (2014), the Supreme Court recently clarified the process for analyzing claims to determine whether claims are directed to patent-ineligible subject matter. In *Alice*, 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 (citing *Mayo*, 132 S.Ct. at 1289). The first step in the analysis is to “determine whether the

claims at issue are directed to one of those patent-ineligible concepts.” *Id.* (citing *Mayo*, 132 S.Ct. at 1296–97). 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.* (citing *Mayo*, 132 S. Ct. at 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). Furthermore, 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*, 130 S.Ct. at 3230 (citing *Diamond v. Diehr*, 450 U.S. 175, 191–92 (1981)).

Petitioner has also asserted each of the challenged claims in the ’506 Patent is unpatentable under 35 U.S.C. § 103(a) over certain references. A claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time of the invention to a person having ordinary skill in the art. *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the

prior art; (3) the level of ordinary skill in the art; and (4) objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). “A determination of whether a patent claim is invalid as obvious under § 103 requires consideration of all four *Graham* factors, and it is error to reach a conclusion of obviousness until all those factors are considered.” *Apple v. Samsung Elecs. Co.*, 839 F.3d 1034, 1048 (Fed. Cir. 2016) (en banc) (citations omitted). “This requirement is in recognition of the fact that each of the *Graham* factors helps inform the ultimate obviousness determination.” *Id.*

D. Level of Ordinary Skill

In determining whether an invention would have been obvious at the time it was made, 35 U.S.C. § 103 requires us to resolve the level of ordinary skill in the pertinent art at the time of the invention. *Graham*, 383 U.S. at 17. “The importance of resolving the level of ordinary skill in the art lies in the necessity of maintaining objectivity in the obviousness inquiry.” *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 718 (Fed. Cir. 1991). The person of ordinary skill in the art is a hypothetical person who is presumed to have known the relevant art at the time of the invention. *In re GPAC, Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995). The level of ordinary skill in the art is reflected by the prior art of record. *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001). Factors that may be considered in determining the level of ordinary skill in the art include, but are not limited to, the types of problems encountered in the art, the sophistication of the technology, and educational level of active workers in the field. *GPAC*, 57

F.3d at 1579. In a given case, one or more factors may predominate. *Id.* Generally, it is easier to establish obviousness under a higher level of ordinary skill in the art. *Innovation Toys, LLC v. MGA Entm't, Inc.*, 637 F.3d 1314, 1323 (Fed. Cir. 2011) (“A less sophisticated level of skill generally favors a determination of nonobviousness . . . while a higher level of skill favors the reverse.”).

Petitioner argues that “[b]ased on the technologies disclosed in the ’506 patent, one of ordinary skill in the art at the time of the alleged invention would have had the equivalent of a Bachelor’s degree or higher in computer science or computer engineering, as well as at least 3–5 years of academic or industry experience in the relevant field.” Pet. 10 (citing Ex. 1002 ¶ 22). Although Patent Owner does not address the level of ordinary skill in its Patent Owner’s Response, Patent Owner does opine about the same in its Motion to Amend. Therein, Patent Owner argues that:

a person of ordinary skill in the art in 1995 would have been a person who had a degree in computer science, or the equivalent of that degree, and some substantive experience with Web technologies then being developed and considered by persons then working on internet systems. [Ex. 2006, 23] It would have been very rare to find anyone to have had a computer degree and as much as three to five years of experience in the area of Web technology as of November 1995. (*Id.*)

Mot. Amend 5–6. Based on the positions of Petitioner and Patent Owner, we find mostly agreement as to the level of skill of such ordinarily skilled artisans and we are persuaded that one of ordinary skill in the art at the time of the invention would have had the equivalent of a degree in computer science or computer engineering, as well as some substantive experience

with Web technologies then being developed and considered by persons then working on Internet systems. This level of skill is considered and applied in the grounds below.

E. Asserted Ground of Unpatentability of Claims 20 and 21

In the Petition, Petitioner alleged that claims 20 and 21 of the '506 Patent are directed to ineligible subject matter. Inst. Dec. 13–16. Patent Owner challenges Petitioner's contentions, arguing that Petitioner fails to demonstrate the unpatentability of the claims. PO Resp. 27–35. In reply, Petitioner maintains its position. Pet. Reply 16–21.

We have reviewed the Petition, Patent Owner's Response, and Petitioner's Reply, as well as the relevant evidence discussed in those papers. For reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence the subject matter of claims 20 and 21 are directed to ineligible subject matter under 35 U.S.C. § 101, as set forth by the Petitioner.

i. Statutory Category

Claims 20 and 21, as well as independent claim 14, recite an apparatus, and these claims nominally fall within the machine category of statutory subject matter.

ii. Ineligible Concept

Petitioner argues that claims 20 and 21 of the '506 Patent are directed merely to an abstract idea of "providing commercial services over the Internet." Pet. 30. Petitioner continues that the "'506 patent is broadly directed to improving 'transactional capabilities on the Web.'" *Id.* at 31

(citing Ex. 1001, 2:27). Petitioner further notes that the challenged claims are not drafted to limit their scope to a particular implementation or technological challenge, and thus are directed to fundamental economic and conventional business practices. *Id.* at 31–32. Additionally, Petitioner alleges that claims 20 and 21 are not directed to a specific improvement to the way that computers operate. *Id.* at 32–34 (citing *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) and *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1258–59 (Fed. Cir. 2014)).

Patent Owner responds by analogizing instant claims 20 and 21 with claims 4–6 of related U.S. Patent No. 8,037,158, discussed in Section I.C above. PO Resp. 27–28. In a covered business method patent proceeding, CBM2013-00013, we noted that “object routing” is “a specific technique that plays a significant part in carrying out the invention recited in claim 4,” which we found was a meaningful limitation restricting claim 4 to a specific application. *SAP America v. Arunachalam*, CBM2013-00013, slip op. at 20–22 (PTAB Sept. 19, 2013) (Paper 15). Patent Owner argues that claims 20 and 21 “pass muster under § 101 for the same reasons as claim 4 of the ’158 patent,” where claims 20 and 21 require “exchange,” just like the “object routing.” PO Resp. 28–31. We do not agree.

As Petitioner notes, claims 20 and 21 do not recite “object routing,” and Patent Owner’s analogy relies upon its proffered claims construction for “exchange,” which we do not adopt. Pet. Reply 17. Petitioner also points to what it alleges is a more apt analogy, i.e., claim 2 in the ’158 patent. Claim 2 specifically recites “an exchange over the Web,” which was found to be

unpatentable under § 101. *Id.* at 17–18 (citing *SAP America v. Arunachalam*, CBM2013-00013, slip op. at 18 (PTAB Sept. 18, 2014) (Paper 61)).

Upon review of the Petitioner’s evidence and analysis, and considering Patent Owner’s rebuttal arguments and analysis, we are persuaded that the challenged claims of the ’506 Patent are directed to the abstract idea of “providing commercial services over the Internet.”

iii. Transformation into a Patent-Eligible Application

With respect to step 2 of *Mayo*, i.e., whether additional elements of the claims transform the nature of the claims into a patent-eligible application of the abstract idea, Petitioner argues that the recited elements of independent claim 14, namely the processor and storage components, “were well-known in the art” and “[t]he remaining limitations represent a series of process steps which do not require automation or computer technology to be performed.” Pet. 35 (citing Ex. 1002 ¶¶ 46–48). With respect to claims 20 and 21, Petitioner argues that those claims do not recite any other components and nothing more than the use of an exchange to manage a transaction, or provide that the service relates to employee payroll information. *Id.* at 35–37.

Patent Owner argues that the claimed invention of the ’506 patent recite “something more” than the alleged abstract idea. PO Resp. 32. Patent Owner argues that claims 20 and 21 “are in ubiquitous use worldwide, causing ‘an improvement in any other technology or technical field’ [Alice slip op at 7] and is an improvement in the ‘functioning of the computer

itself.’ The ‘something more’ recited in claims 20 and 21 are something that are not ‘well known in the art.’” *Id.* at 33. Looking to the elements of claims 20 and 21, we are not persuaded that those elements were not well known at the time of the ’506 Patent. As discussed below, we remain persuaded that Lawlor, CORBA, and Billings, among others, illustrate that the elements of claims 20 and 21 were well known in the relevant period.

Patent Owner also argues that challenged “claims 20 and 21 do not preempt all practical uses of the ‘abstract idea’ to which they are allegedly directed.” PO Resp. 33 (citing to the “prosecution history of the parent ‘178, ‘500 and ‘556 patents”). Patent Owner’s assertions, without more, are not persuasive of non-preemptive effect. Additionally, as Petitioner points out, even if the claims did not preempt all practical uses, the absence of complete preemption does not demonstrate patentability on its own. Pet. Reply 19 (citing *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015)).

Patent Owner further argues that claims 20 and 21 follow the same logic as *DDR Holdings* because “the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.” PO Resp. 34–35 (quoting *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014)). As Petitioner notes, however, claims 20 and 21 are directed to “providing a commercial service . . . which is not technical in nature.” Pet. Reply 19–20. We agree.

Lastly, Patent Owner argues that “claims 20 and 21 recite an apparatus that is a special purpose computer or results in some form of transformation of the computer or a physical transformation in an object or system external to the computer...” PO Resp. 35. We agree, however, with Petitioner that the challenged claims do not recite a special purpose computer, nor does Patent Owner point to any specific claim limitations that function as a special purpose computer. Instead, the challenged claims solely disclose the use of general computer systems.

We are persuaded by Petitioner’s analysis (Pet. 35–37) that additional elements of the claims do not transform the nature of the claims into a patent-eligible application of the abstract idea. On this record, we are persuaded that these computer-related limitations are not meaningful limitations that can salvage these claims and make them patent eligible, and that that these computer-related limitations require nothing more than the routine and conventional use of a computer to receive, retrieve, and communicate information, and the handling of information requests. *See Mayo*, 132 S.Ct. at 1298. To be limited meaningfully, the claim must contain more than mere field-of-use limitations, tangential references to technology, insignificant pre- or post-solution activity, ancillary data-gathering steps, or the like. *Id.* at 1297.

As such, we are persuaded that Petitioner has shown by a preponderance of the evidence the subject matter of claims 20 and 21 of the ’506 Patent are directed to ineligible subject matter under 35 U.S.C. § 101.

*F. Asserted Grounds of Obviousness of Claims 20 and 21
over combinations of Lawlor, CORBA, and Billings*

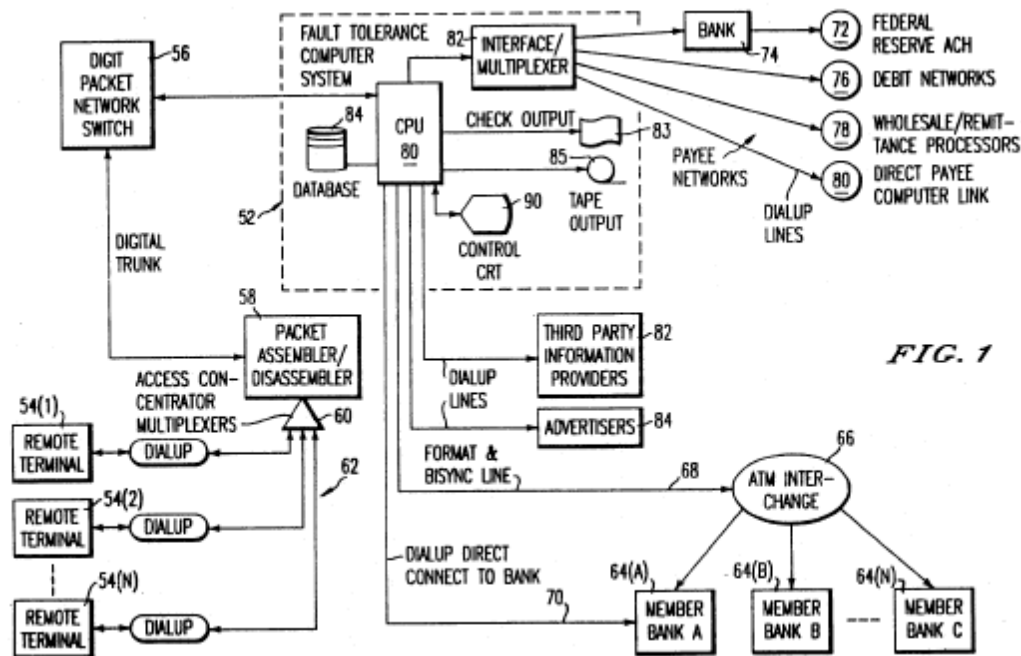
Petitioner asserts that claim 20 is obvious over the combination of Lawlor and CORBA. Pet. 38–68. Petitioner also asserts that claim 21 is obvious over the combination of Lawlor, CORBA, and Billings. *Id.* at 68–73. Petitioner relies on the testimony of Dr. Marvin Sirbu to support its obviousness grounds. See Ex. 1002. Patent Owner challenges Petitioner’s contentions, arguing that Petitioner fails to demonstrate the obviousness of the claims. PO Resp. 74–81. In reply, Petitioner maintains its position. Reply 21–26.

We have reviewed the Petition, Patent Owner’s Response, and Petitioner’s Reply, as well as the relevant evidence discussed in those papers. For reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence the subject matter of claim 20 would have been obvious over the combination of Lawlor and CORBA, and that the subject matter of claim 21 would have been obvious over the combination of Lawlor, CORBA and Billings, as set forth by the Petitioner.

1. Summary of Asserted Prior Art

a. Summary of Lawlor

Lawlor provides a system for remotely accessing financial services from portable user terminals, where those user terminals establish contact with a central computer operated by a service provider over a network such as telephone network or a packet data network. Ex. 1004, Abs. Figure 1 of Lawlor is reproduced below and illustrates the architecture of its disclosed system.



As shown in Figure 1, above, remote terminals 54, which can be portable terminals, contact the centralized system including central computer 52, where that central computer “interfaces with banking institutions and with other financial institutions 64 through the existing conventional automatic teller machine (ATM) interchange switch 66 (referred to herein as the ‘ATM network’).” *Id.* at 18:19–58. The central computer also communicates with additional remote data processing systems such as Federal Reserve ACH 72, debit networks 76, wholesalers/remittance processors 78, direct payee computer systems 80, third party information providers 82 and advertisers 84.

b. Summary of CORBA

CORBA is directed to the CORBA standard, which uses object-oriented network techniques to route a user to processing provided by a

service provider. Ex. 1005, 35. The CORBA standard defines a distributed environment “using an object-oriented paradigm that hides all differences between programming languages, operating systems, and object location.” *Id.* The interoperability offered by CORBA “is accomplished through well-defined interface specifications at the application level,” where the object request broker (ORB) is the central component of the CORBA architecture “function[ing] as a communication infrastructure, transparently relaying object requests across distributed heterogeneous computing environments.” *Id.* at 35–36. CORBA provides that “[a]n object is in a client role when it is the originator of an object invocation” and “[a]n object is in a server role when it is the recipient of an object invocation.” *Id.* at 37. It is also noted that “[m]ore flexible architectures can be implemented using CORBA rather than the pure client-server architectures imposed by remote procedure calls. *Id.*

CORBA also includes a “naming service” that enables the retrieval of object handles based on the string-valued name of an object server, where objects can be named hierarchically, with each object being named at a node in the tree. Ex. 1005, 48–49; Ex. 1002 ¶ 62. The CORBA standard can be used to provide “Internet services,” where “object references” can include an Internet address. Ex. 1005, 100; Ex. 1002 ¶ 63. Therein a cell directory server (CDS) can map the hierarchically named objects to object handles that are IP addresses branching from the address of the server where the object resides, such that an object is reachable at that IP address. Ex. 1002 ¶ 65. Client objects implement front-end user interfaces that are customized

to a user while processing and data storage are implemented as back-end or application facilities. Ex. 1005, 102.

In the “Internet Services” implementation with CORBA, client objects receive requests from their respective user and the client object then invokes a server object (passing arguments extracted from the user’s request) to process the client’s request. Ex. 1002 ¶ 69. The client object accesses the server object through a string identifier of the object, which is mapped to the object’s Internet address, where the user is routed to processing provided by the service provider through the use of individual network objects. *Id.*

c. Summary of Billings

Billings discloses a “functionally structured distributed data processing system” that “includes a plurality of independently operating user station processors for servicing users, a data center for storing data . . . , and a communication network for coupling each user station to one or more data centers. Ex. 1006, Abs. The data center responds to requests for service from user stations and retrieves stored data in response to the requests, and the retrieved data are then supplied to the requesting user station. *Id.* at 5:19–23. The data stored at the data center can include “data relating to the personnel of a company, payroll information regarding such personnel, accounts payable and accounts receivable data, information regarding occupancies and vacancies in a hotel chain or airline system, and generally any type of data which may be of interest to more than one user station.” *Id.* at 5:19–23, 6:20–27.

2. *Claims 20 and 21*

Claim 20 is directed to an apparatus for providing a service over a digital network wherein the transaction is handed over to an exchange, wherein the exchange manages the connection between the user and the commercial service, wherein the commercial service is an online service operating across the digital network, wherein the digital network is a value-added service network atop the Web. Ex. 1001, *Inter Partes* Reexam. Cert. 1:20–25. Claim 21 is directed to an apparatus for providing a service over a digital network wherein the first computer system offering the commercial service comprising access to employee payroll information on a service network atop the Web. *Id.* at 1:26–29.

a. Petitioner's Contentions

Petitioner asserts that claim 20 is obvious over the combination of Lawlor and CORBA. Pet. 38–68. According to Petitioner, communications between the central computer and remote data processing systems can occur over the ATM network, a telephone network, or other data network. Ex. 1002 ¶ 54. Through this system architecture, Lawlor provides, in particular, “a practical, cost-effective, workable system and method for delivering banking and other financial services (including bill paying capabilities) to remote sites such as customer homes and offices.” Ex. 1004, 6:38–44.

Petitioner also asserts that Lawlor teaches or suggests all of the communication steps recited in claims 14 and 20, but that Lawlor does not explicitly disclose objects, object handling, or object storage. *Id.* at 39.

Petitioner further asserts that such claim limitations are disclosed by CORBA, and that one of ordinary skill in the art would have been motivated to combine the object handling and storage of CORBA in the distributed commercial service application of Lawlor. *Id.*

Petitioner alleges that a person of ordinary skill would be motivated to combine Lawlor with CORBA in order to enable efficient and scalable communication between the central computer of Lawlor and various external systems (*e.g.*, external banks and information providers), as well as distribute the functionality of Lawlor's central computer across multiple computing devices. Pet. 46 (citing Ex. 1002 ¶ 70). Petitioner also argues that a person of ordinary skill in the art would have looked to CORBA to provide and make more efficient the communication in Lawlor with heterogeneous external systems through the use of CORBA's interfaces. Pet. 47 (citing Ex. 1002 ¶ 72). Petitioner continues that the combination of Lawlor and CORBA would have been nothing more than combining prior art elements according to known methods to yield the predictable and desirable result of standardizing and managing communication with a variety of commercial services, and the combined system would enable efficient and scalable remote delivery of a plurality of commercial services. Pet. 47–48 (citing Ex. 1002 ¶ 73).

Petitioner goes through the elements of claim 14 and argues that Lawlor and CORBA teach or suggest all of those elements. Pet. 48–63. With respect to particular elements, Petitioner suggests that the combination would have rendered those elements obvious. For example, with respect to

“associating an object identity with information entries and attributes, wherein the object identity represents a networked object,” Petitioner acknowledges that this aspect is not disclosed by Lawlor, but that CORBA’s object-oriented paradigm for communication between heterogeneous applications would have suggested such a functionality in the combination. *Id.* at 57–60. Additionally, with respect to the limitation of claim 14 of “assigning a unique network address to said object identity,” Petitioner acknowledges that Lawlor does not explicitly teach the same, but that CORBA teaches the same through its disclosure of it “naming service,” discussed above. *Id.* at 61–63.

With respect to claim 20, Petitioner argues that although Lawlor does not explicitly describe a separate “exchange” component that “manages the connection between the user and the commercial service,” a person of ordinary skill in the art would have recognized that the central computer of Lawlor provides the required functions of an “exchange” component, and that a modern modular software design would encapsulate these functions as its own component. Pet. 63 (citing Ex. 1002 ¶ 116). Additionally, Petitioner argues that a person of ordinary skill in the art would also recognize that combining the functions of the central computer of Lawlor with the system described in CORBA would provide the required functions of an “exchange,” wherein the transaction processing functions of Lawlor, such as the discussed bill process routine, could be provided as CORBA objects. Pet. 64 (citing Ex. 1002 ¶ 118). Lastly, Petitioner argues that Lawlor describes “commercial service[s]” operating across a “digital network,”

because Lawlor describes funds transfer services accessible over a digital network, such as an asynchronous communications link between the remote terminal and a central computer system operated by the service provider. Pet. 65–66 (citing Ex. 1002 ¶ 120; Ex. 1004 7:7–19, 16:66–17:2).

Petitioner also asserts that claim 21 is obvious over the combination of Lawlor, CORBA, and Billings. Pet. 68–73. Petitioner relies on the analysis of the combination of Lawlor and CORBA, detailing that the combination of Lawlor and CORBA render claim 14 obvious, but fail to disclose the recitations of claim 21, specifically “the first computer system offering the commercial service comprising access to employee payroll information on a service network atop the Web,” but such limitations are disclosed by Billings. *Id.* at 68.

Petitioner argues that Lawlor provides services other than an underlying network connection between a remote user terminal and services provided by a user’s bank, so that Lawlor “describes additional processing and data transformation services as part of the network communication between a remote user terminal and a commercial service.” Pet. 71–72. Petitioner continues that although Lawlor does not explicitly describe that the digital network is “atop the Web,” per claim 21, the use of the Web in Lawlor would have been obvious to persons of ordinary skill in the art. *Id.* at 72.

Petitioner also asserts that one of ordinary skill would be motivated to adapt the techniques used in Lawlor to access banking information to additionally connect to a service with access to employee payroll

information as described in Billing. *Id.* (citing Ex. 1002 ¶ 132). Petitioner asserts that the combination would have been nothing more than combining prior art elements according to known methods to yield a predictable and desirable result. *Id.* at 73. Petitioner also asserts that it would have been obvious to implement the object-oriented techniques of CORBA to manage communication between Lawlor’s central computer and an external employee payroll service. *Id.* (citing Ex. 1002 ¶ 133).

As explained below, we agree with and adopt Petitioner’s analysis as our own fact findings and determine that Petitioner has shown, by a preponderance of the evidence, that the challenged claims would have been obvious over the asserted references. We have reviewed both parties’ arguments and supporting evidence, including the disclosure of all three references and the testimonies of Drs. Sirbu and Arunachalam. Pet. 38–73; PO Resp. 78–81; Reply 21–26; Exs. 1002, 2005. For the reasons discussed below, we do not agree with Patent Owner’s arguments to the contrary.

b. Patent Owner’s Contentions Regarding the Prior Art

Patent Owner begins by arguing that “[n]owhere in the cited prior art is there any disclosure or suggestion of Exchange which includes an object routing component.” PO Resp. 74–76. As Petitioner notes, however, claims 20 and 21 do not recite an object routing component; rather that aspect is introduced into those claims through Patent Owner’s construction of “exchange.” Pet. Reply 21.

Additionally, Patent Owner fails to address CORBA, which uses object-oriented network techniques to route a user to processing provided by

a service provider. As discussed above, Petitioner's declarant, Dr. Sirbu testifies that the transaction processing functions of Lawlor, such as the "bill process routine," could be provided as CORBA objects. Ex. 1002 ¶¶ 86, 118. In response to receiving a user request, these objects would invoke a server object representing a commercial service provided by a service provider, with this invocation occurring via the object request broker (ORB), which "functions as a communication infrastructure, transparently relaying object requests across distributed heterogeneous computing environments." *Id.* ¶ 118 (quoting Ex. 1005, 36).

Patent Owner also asserts that the prior art does not teach the use of "a value-added service network atop the Web." PO Resp. 76. Patent Owner continues that "web applications" were not known, asserting that "[n]one of the cited prior art discloses or suggests, alone or in combination, the use of an application that is a web client in a web browser." *Id.* at 76–78. As Petitioner points out, however, claims 20 and 21 do not recite a "Web application"; instead, Patent Owner interjects a discussion of such applications in its claim constructions. Pet. Reply 23. As discussed above, a "Web application" is only made through the particular embodiment depicted in Figure 5 of the '506 patent, but reliance on the embodiment depicted in Figure 5 is insufficient to import specific implementation details into the claims.

Patent Owner further argues that the combination of Lawlor and CORBA, as well as the combination of Lawlor, CORBA, and Billings, uses improper hindsight. PO Resp. 78–81. Patent Owner asserts that "it would

not have been obvious to make any changes to Lawlor's system," and that "the whole purpose of Lawlor is to establish a system built upon an existing software and infrastructure that would require no changes." PO Resp. 80–81 (emphasis in original). We do not agree.

We agree with Petitioner that Patent Owner misinterprets Lawlor's teachings, "improperly concluding that Lawlor teaches away from **any** combination or modification." Pet. Reply 24 (emphasis in original). Lawlor explains that "[b]ecause the central computer interacts with the user's bank as a standard POS or ATM network node, no significant software changes are required at the banks' computers," demonstrating that Lawlor makes use of a standard ATM network and existing external systems without significant modification. Ex. 1004, Abstr. As explained by Dr. Sirbu, incorporation of techniques described in CORBA into Lawlor's system would not require modification to the external systems of Lawlor or additional processing at the central computer of Lawlor. Ex. 1002 ¶ 72. Lawlor system does not restrict or disparage modification, and Patent Owner has not pointed out any portion that purportedly restricts or disparages modification.

Patent Owner also argues that Lawlor does not disclose "an OSI Layer 7 application layer switch as is the VAN Switch in FIG. 5B." PO Resp. 79. As discussed above, however, challenged claims 20 and 21 do not recite a VAN switch, and the only consideration of such a switch comes from Patent Owner's claims constructions that we do not adopt.

As such, we are persuaded that Petitioner has shown by a

preponderance of the evidence that claim 20 is unpatentable over the combination of Lawlor and CORBA, and that the subject matter of claim 21 is unpatentable over the combination of Lawlor, CORBA and Billings.

G. Patent Owner's Additional Assertions

Patent Owner expounds at length about additional issues that are generally beyond the scope of this proceeding. These include that the Board lacks jurisdiction due to (1) the priority date of the '506 Patent, or (2) because of some prior action by the Board or other court. PO Resp. 1–11. With respect to our jurisdiction or asserted conflict of interest of the instant panel, we adopt Petitioner's response that Patent Owner has failed to provide a basis for such arguments. *See* Pet. Reply 1–3. Also included are assertions that reexamination and post-grant proceedings are unconstitutional and that the AIA should be void, both of which are also beyond the scope of this proceeding. *Id.* at 11–17. We take no position on the arguments raised by Patent Owner that are beyond the scope of this proceeding.

III. MOTION TO AMEND

Patent Owner specifically points out that claims 20 and 21 are not being amended, and that 28 new claims are being proposed, i.e., claims 22–49. Mot. Amend 2. Some of the new proposed claims depend on independent claim 1, which was cancelled during reexamination and is not at issue in this proceeding. *Id.* Petitioner opposes the Motion (Opp. 1–35), and Patent Owner replies (PO Reply 2–11) in support of its Motion. *See also* Paper 15, Claim Appendix (“Claim App’x”) (claim listing of proposed new

claims).

A. Procedural Requirements

A motion to amend must meet the statutory requirements of 35 U.S.C. § 326(d) (i.e., propose a reasonable number of substitute claims, and propose substitute claims that do not enlarge scope of the original claims of the patent or introduce new matter). In addition, a patent owner must meet the regulatory requirements for a motion to amend under 37 C.F.R. § 42.121 or § 42.221, as applicable. Rule 221, applicable to the proceeding here, is reproduced, in part, below:

§ 42.221 Amendment of the patent.

(a) *Motion to amend.* A patent owner may file one motion to amend a patent, but only after conferring with the Board.

(1) *Due date.* Unless a due date is provided in a Board order, a motion to amend must be filed no later than the filing of a patent owner response.

(2) *Scope.* A motion to amend may be denied where:

(i) The amendment does not respond to a ground of unpatentability involved in the trial; or

(ii) The amendment seeks to enlarge the scope of the claims of the patent or introduce new subject matter.

(3) *A reasonable number of substitute claims.* A motion to amend may cancel a challenged claim or propose a reasonable number of substitute claims. The presumption is that only one substitute claim would be needed to replace each challenged claim, and it may be rebutted by a demonstration of need.

(b) *Content.* A motion to amend claims must include a claim listing, which claim listing may be contained in an appendix to the motion, show the changes clearly, and set forth:

- (1) The support in the original disclosure of the patent for each claim that is added or amended; and
- (2) The support in an earlier-filed disclosure for each claim for which benefit of the filing date of the earlier filed disclosure is sought.

37 C.F.R. § 42.221(a) and (b).

The U.S. Court of Appeals for the Federal Circuit recently ruled on motion to amend practice in post-grant proceedings, determining that the patentability of proposed substitute claims should be made without placing the burden of persuasion on the patent owner. *See Aqua Products, Inc. v. Matal*, 872 F.3d 1290, 1296 (Fed. Cir. 2017). Although the consensus of the *en banc* Court was narrow and included multiple opinions, most of those opinions addressed the procedural requirements that patent owners must fulfill to have a motion to amend be considered by the Board. “[W]e believe that the only reasonable reading of the burden imposed on the movant in § 316(d) is that the patent owner must satisfy the Board that the statutory criteria in § 316(d)(1)(a)–(b) and § 316(d)(3) are met and that any reasonable procedural obligations imposed by the Director are satisfied before the amendment is entered into the IPR.” *Id.* at 1305–1306. “There is no disagreement that the patent owner bears a burden of production in accordance 35 U.S.C. § 316(d). Indeed, the Patent Office has adopted regulations that address what a patent owner must submit in moving to amend the patent.” *Id.* at 1341. “[C]ertain PTO regulations imposing burdens of production on the patent owner are undisturbed and therefore applicable on remand in this case.” *Id.* at 1342. “The statute delegates rulemaking authority to the Patent and Trademark Office for the conduct of

inter partes reviews generally, and to set procedures for the amendment of claims specifically.” *Id.* at 1358.

In light of the *Aqua Products* decision, as discussed in Guidance recently provided by the Chief Judge, the Board will not place the burden of persuasion on a patent owner with respect to the patentability of substitute claims presented in a motion to amend. See “Guidance on Motions to Amend in view of Aqua Products” (Nov. 21, 2017) (https://www.uspto.gov/sites/default/files/documents/guidance_on_motions_to_amend_11_2017.pdf) (“Guidance”). As also explained in the Guidance, and noted above, a motion to amend still must meet the statutory requirements of 35 U.S.C. § 316(d) and the procedural requirements of 37 C.F.R. § 42.121 or § 42.221, as applicable. *Id.*

Overall, we base our decision on the substitute or new claims provided in the Motion to Amend on the entirety of the record before us. Petitioner’s arguments regarding the patentability of the substitute or new claims, as well as Patent Owner’s reply thereto, are considered below, after consideration of the procedural requirements of Rule 221 and 35 U.S.C. § 326(d).

B. Nature of New Claims

Patent Owner proposes new claims 22–49 in its Motion to Amend, with new claims 42 and 44 being independent, and the other new claims being dependent on claims 1 or 14. See Claim App’x. Patent Owner does not seek substitutes for claims 20 and 21, the claims challenged in this proceeding. Mot. Amend 2. As discussed above, we are persuaded that

Petitioner has demonstrated that claims 20 and 21 are unpatentable. Claim 1 was previously cancelled during reexamination, along with independent claims 14–16, and dependent claims 2–13 and 17–19. *See* Ex. 1001, Reexam. Cert. 1:17.

Patent Owner also lists original claims 1–19, which are asserted to be valid. *Id.* As discussed above, the viability of the prior original claims are not before us in this proceeding, so we do not opine on Patent Owner’s listing of original claims 1–19.

Patent Owner characterizes the new claims as setting forth “a ‘tip to tail’ specification of the architecture of a robust, real-time, two-way Web transaction system.” Mot. Amend 4. Patent Owner indicates that the new claims specify that an application layer switch includes a switching service over the Web, an application service, a management service, and an object router over the Web. *Id.* Patent Owner also indicates that the transaction take place through the use of object routing, where the objects are networked objects that include information entries and attributes, and such entries and attributes are displayed on the user's Web page in the Point-of-Service (POSvc) application. *Id.*

C. Patent Owner’s Compliance with Substantive Requirements

As discussed below, Patent Owner has failed to meet the requirements Rule 221(a) and (b)(1), or the statutory requirements of 35 U.S.C. § 326(d)(1)(B) and (3), for a motion to amend. We are persuaded that these failures are sufficient to deny Patent Owner’s Motion to Amend.

1. 37 C.F.R. § 42.221(a)

The first section of Rule 221 indicates that a patent owner may file a motion to amend, “but only after conferring with the Board.” The initial Scheduling Order (Paper 11) set Due Date 1, the due date for a motion to amend to be filed, as March 15, 2017, with the Board reminding the parties that any conference call satisfying the conferral requirement “should be conducted at least one week before Due Date 1.” Ex. 3002, 5. Initially, Patent Owner indicated availability for such a teleconference with the Board, but advised that she would be unable to pay for a court reporter for such a conference call. *Id.* When Petitioner indicated a willingness to arrange for a court reporter (*id.* at 4), Patent Owner still did not agree to the conferral conference call.

Patent Owner stated: “I don't see a reason for a call, if it is just to waste your time, my time and everyone's time to do more fraud on the court and to decide whether they will docket my filings.” *Id.* at 3. As such, Patent Owner refused to comply with “conferral” requirement that is listed in Rule 221. Nonetheless, we authorized entry of the instant Motion to Amend, to allow for its consideration, and because of Patent Owner's *pro se* status. We did not, however, specifically waive the requirement that the Patent Owner confer with the Board. For at least this reason, we find that Patent Owner has not complied with the requirements of 37 C.F.R. § 42.221(a).

2. *37 C.F.R. § 42.221(a)(2)(i)*

Rule 221(a)(2)(i) requires that the amendments in a motion to amend must respond to a ground of unpatentability involved in the trial. Patent Owner's new claims do not respond to any ground of unpatentability in the trial. Those grounds are based on 35 U.S.C. §§ 101, 103 and directed at claims 20 and 21. Pet. 28–73. Both claims 20 and 21 depend on claim 14 and the grounds of unpatentability consider all of the elements of claim 14. Thus, for example, new claim 25, which recites “[t]he apparatus of claim 14, wherein the user device is a multi-media device,” does not purport to demonstrate that such a claim brings the subject matter into the scope of § 101, nor that such a multi-media device would not be obvious over Lawlor, CORBA, and Billings. See Mot. Amend 9–17. Patent Owner's analysis addresses claims 22–49 as a group and does not address all of the elements of the new claims. *Id.* Patent Owner also fails to indicate if any of the new claims include any feature of the challenged claims. For at least these reasons, we find that Patent Owner has not complied with the substantive requirements of 37 C.F.R. § 42.221(a)(2)(i).

3. *37 C.F.R. § 42.221(a)(2)(ii) and 35 U.S.C. § 326(d)(3)*

Rule 221(a)(2)(i) requires that the amendment may not seek to enlarge the scope of the claims of the patent. We also note that this rule is fully supported by 35 U.S.C. § 326(d)(3), which details that “[a]n amendment under this subsection may not enlarge the scope of the claims of the patent.” Patent Owner appears to take this rule as merely requiring that “the new claims do not enlarge the scope of any of the old claims.” Mot. Amend 3.

The “old claims,” however, are the only two claims existing in the ’506 Patent, namely claims 20 and 21. They are the “scope of the claims of the patent,” and the scope cannot refer to any claim that might have existed during the prosecution of the ’506 Patent. *See Arlington Industries, Inc. v. Bridgeport Fittings, Inc.*, 345 F.3d 1318, 1329–30 (Fed. Cir. 2003). Therefore, we look to the scope of claims 20 and 21 to determine the scope of the claims of a patent.

Proposed new claims in the Motion to Amend improperly enlarge the scope of claims 20 and 21. For example, new claim 27 recites “[t]he apparatus of claim 14, wherein the service is configurable specific to the context of a Web merchant.” This proposed claim is broader, in at least one aspect, than claims 20 and 21, which also depend from claim 14, because it contains none of the elements of claims 20 and 21, although it adds an additional element, i.e., “the service is configurable specific to the context of a Web merchant.” For at least these reasons, we find that Patent Owner has not complied with the substantive requirements of 37 C.F.R. § 42.221(a)(2)(ii) or 35 U.S.C. § 326(d)(3).

4. § 42.221(a)(3) and 35 U.S.C. § 326(d)(1)(B)

Section (a)(3) of Rule 221 discusses that a patent owner must propose a reasonable number of substitute claims, and goes on to discuss that “[t]he presumption is that only one substitute claim would be needed to replace each challenged claim, and it may be rebutted by a demonstration of need.” The claims subject to the instant proceeding are claims 20 and 21, such that the normal presumption would be for the inclusion of two substitute claims.

Patent Owner does not address why the proposed 28 claims are a reasonable number of substitutes for the 2 challenged claims, so Patent Owner cannot be said to have rebutted the one for one presumption by any demonstration of need.

We also note that this rule is fully supported by 35 U.S.C. § 326(d)(1)(B), which details that for the amendment of a patent, for each challenged claim, “a reasonable number of substitute claims” must be proposed. Petitioner points out that the meaning of “reasonable number of substitute claims” has been previously addressed by the Board, providing “in the absence of special circumstance, a challenged claim can be replaced by only one claim, and a motion to amend should, for each proposed substitute claim, specifically identify the challenged claim which it is intended to replace.” Opp. 1–2 (citing *Idle Free* at 5). Furthermore, as Petitioner addresses, Patent Owner has failed to identify which of the challenged claims are intended to be replaced by the new claims. *Id.* Patent Owner’s response appears to be that “PO does not propose a reasonable number of substitute claims, **because it is not necessary.**” PO Reply 2. This, however, is not responsive. For at least these reasons, we find that Patent Owner has not complied with the substantive requirements of 37 C.F.R. § 42.221(a)(3) or the statutory requirements of § 326(d)(1)(B).

5. 37 C.F.R. § 42.221(b)(1)

Rule 221(b)(1) requires that a motion to amend must show the changes clearly and set forth the support in the original disclosure of the patent for claim that is added. In the case of new claims 22–49, Patent Owner does

not indicate any changes from the claims subject to the present proceeding. The claims are indicated as being new, so that no changes from the pending claims are discussed at all. *See* Claim App'x.

In addition, Patent Owner argues that written description support for the new claims can be found in a chart provided in a reexamination of the patent. Mot. Amend 3 (citing *inter partes* Reexamination Control No. 95/001,129). We note that such incorporation by reference is not permitted under our rules. 37 C.F.R. § 42.6(a)(3). As well, as Petitioner points out, Patent Owner has not demonstrated that the claims provided in the chart are the same as the new claims. Opp. 4. Given this deficit, Patent Owner cannot successfully meet the regulatory requirements under 37 C.F.R. § 42.221(a) or (b)(1) regarding written description support, based on the present record. Additionally, Patent Owner has failed to provide any mapping of the new claims to those old claims, and, as Petitioner points out, the Board determined during the cited *inter partes* reexamination that no written description support was provided for a number of limitations identical to those recited in the new claims. *Id.* (citing Ex. 1007, 32–36). For at least these reasons, we find that Patent Owner has not complied with the substantive requirements of 37 C.F.R. § 42.221(b)(1).

6. Conclusion

As discussed above, Patent Owner has not demonstrated compliance with 37 C.F.R. §§ 42.221(a), 42.221(a)(2)(i), 42.221(a)(2)(i), 42.221(a)(3), or 42.221(b)(1) or 35 U.S.C. § 326(d)(1)(B) and (3). As such, Patent Owner has failed to meet the substantive requirements for a motion to amend.

Therefore, we are persuaded that these failures are sufficient to deny Patent Owner's Motion to Amend. Although we are persuaded to deny the Motion to Amend, we nonetheless also address the patentability over the prior art of the substitute or new claims presented in the Motion to Amend, below.

D. Status of New Claims with Respect to Prior Art

Patent Owner argues that “[n]one of the prior art discloses or suggests, alone or in combination,” specific elements of the new claims. Mot. Amend 9–17. Patent Owner addresses the claims collectively, i.e. as claims 22–49, and does not address specific elements. This is problematic, however, because many new claims, such as those that depend from claims 1 or 14, do not recite the specific elements discussed, i.e., Point-of-Service Web applications, etc. This suggests that Patent Owner is construing the new claims as reciting those elements through the claim constructions discussed above. As we are not persuaded that those claim constructions should be adopted, Patent Owner's arguments are likewise unpersuasive.

Where specific elements of the claims are recited in the new claims, and where Patent Owner argues patentability over the art of record and art known to the Patent Owner, Petitioner's Opposition is enlightening. Petitioner proffers a chart with comparisons between the new claims and the claims appealed during the *inter partes* reexamination of the '506 Patent. Opp. 7–15. Petitioner follows with a discussion of each new claim, and how an identical or nearly identical claim was addressed in that appeal. Opp. 15–35 (citing Ex. 1007). In response, Patent Owner argues that new claims 22–49 do not recite identical limitations to claims already found to be

unpatentable, but does not distinguish the new claims from the old claims in any way, and does not point out any inaccuracies in Petitioner's comparison of such claims. PO Reply 4.

Based on the entirety of the record before us, we are persuaded that a preponderance of the evidence establishes that new claims 22–49 are not patentable with respect to prior art of record. For example, with respect to new claim 40, Petitioner correctly identifies that claim as being identical to claim 58 appealed during the *inter partes* reexamination of the '506 Patent. Opp. 27. As Petitioner correctly notes, the Board affirmed the rejection of claim 58 over (1) Payne, (2) the combination of Payne and Gifford, (3) Ginter, (4) the combination of Popp and RFC 1155 or RFC 1213, (5) the combination of Popp and RFC 1447, (6) the combination of Popp and RFC 1213, and (7) Miller. *Id.* at 28 (citing Ex. 1007, 4, 36). We find the correspondences between the new and old claims, cited by Petitioner, as well as the prior affirmed rejections, to be persuasive of the unpatentability of 22–49 over the prior art of record.

In view of the foregoing, and based on the entirety of the record before us, we are persuaded that a preponderance of the evidence establishes that new claims 22–49 are not patentable over the prior art of record.

IV. CONCLUSION

For the foregoing reasons, we determine the following:

1. Petitioner has shown by a preponderance of the evidence that the subject matter of claims 20 and 21 of the '506 Patent are directed to ineligible subject matter under 35 U.S.C. § 101;
2. Petitioner has shown by a preponderance of the evidence that claims 20 and 21 of the '506 Patent are unpatentable over combinations of Lawlor, CORBA, and Billings; and
3. Patent Owner's Motion to Amend fails to comply with regulatory and statutory procedural requirements and, regardless, based on the entirety of the record, a preponderance of evidence establishes that new claims 22–49 proposed in the Motion to Amend are not patentable over the prior art of record.

V. ORDER

Accordingly, it is:

ORDERED that claims 20 and 21 of U.S. Patent No. 7,340,506 C1 have been shown to be unpatentable;

FURTHER ORDERED that Patent Owner's Motion to Amend is *denied*;

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.

CBM2016-00081
Patent 7,340,506 C1

PETITIONER:

Lori A. Gordon
Salvador M. Bezos
Michael Q. Lee
STERNE, KESSLER, GOLDSTEIN FOX P.L.L.C.
lgordon-PTAB@skgf.com
sbezos-PTAB@skgf.com
mlee-PTAB@skgf.com

PATENT OWNER:

Lakshmi Arunachalam
laks22002@yahoo.com