

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAP AMERICA, INC.,
Petitioner,

v.

LAKSHMI ARUNACHALAM,
Patent Owner.

Case IPR2013-00195
Patent 5,987,500

Before KARL D. EASTHOM, WILLIAM V. SAINDON, and
BRIAN J. McNAMARA, Administrative Patent Judges.

McNAMARA, *Administrative Patent Judge.*

FINAL WRITTEN DECISION
35 U.S.C. § 318(a) and
37C.F.R. § 42.73

BACKGROUND

On September 19, 2013, we entered a Decision to Institute (“Dec. to Inst.”) a trial in this proceeding, *SAP America, Inc. v. Pi-Net International, Inc.*, Case IPR2013-00195, which concerns U.S. Patent No. 5,987,500 (“the ’500 Patent”), as well as the following related proceedings: *SAP America, Inc. v. Pi-Net International, Inc.*, Case IPR2013-00194, which concerns U.S. Patent No. 8,108,492 B2 (“the ’492 Patent”), and *SAP America, Inc. v. Pi-Net International, Inc.*, Case CBM2013-00013, which concerns U.S. Patent No. 8,037,158 B2 (“the ’158 Patent”). The ’492, ’500, and ’158 Patents have since been assigned by Pi-Net International to the inventor Lakshmi Arunachalam (“Patent Owner”).¹ On September 10, 2014, Patent Owner filed a Mandatory Notice indicating that she is now acting *pro se*. Paper 62. The ’492, ’500, and ’158 Patents share substantially the same specification.

In this proceeding (IPR2013-00195), we instituted trial on the challenge to claims 1–6, 10–12, 14–17, and 35 on the asserted ground of anticipation under 35 U.S.C. § 102 by Chelliah². Patent Owner filed a Corrected Patent Owner Response (Paper 29, “PO Resp.”) and a Corrected Motion to Amend (Paper 30, “Mot. to Amend”). Petitioner filed a Reply to the Patent Owner Response (Paper 42, “PO Resp.”), an Opposition to Patent Owner’s Motion to Amend (Paper 43, “Opp. to Mot. to Amend”), and a Motion to Exclude certain exhibits filed by Patent Owner (Paper 47, “Mot. to Exclude”), which Patent Owner has opposed (Paper 50).

In this final written decision, we conclude that Petitioner has shown by a preponderance of the evidence that claims 1–6, 10–12, 14–17, and 35 are

¹ Assignment recorded at Reel/Frame 033684/0252 on September 9, 2014.

² U.S. Patent No. 5,710,887, issued Jan. 20, 1998 (“Ex. 1003”).

anticipated by Chelliah and, therefore, unpatentable. We also deny Patent Owner's Motion to Amend and deny Petitioner's Motion to Exclude certain exhibits.

THE '500 PATENT

The specification of the '500 Patent is the same as that of U.S. Patent No. 8,108,492 B2, which we address in IPR2013-00194. Column and line references in this section are to the '492 Patent.

The '492 Patent purports to provide "a method and apparatus for providing real-time, two-way transactional capabilities on the Web." '492 Patent, Abstract. The '492 Patent specification states that "[a] 'transaction' for purposes of the present invention includes any type of commercial or other type of interaction that a user may want to perform." *Id.* at col. 5, ll. 32–35. The '492 Patent also states that Figure 4A illustrates conceptually the user value chain, depicting the types of transactions and the channels through which the transactions are performed "today," i.e., at least as early as the priority date of the application that led to the '492 Patent. *Id.* at col. 5, ll. 29–35. Thus, Figure 4A represents a prior art value chain, rather than the invention.

Figure 4B illustrates an embodiment of the invention in which a Web merchant provides real-time transactional capabilities to users who access a merchant's services through switching sites on Web servers or on non-Web network computer sites and cellular provider sites. *Id.* at col. 5, l. 55–col. 6, l. 1. The '492 Patent specification states that the embodiment shown in Figure 4B includes a service network running on top of a facilities network, namely the Internet, the Web, or e-mail networks. *Id.* at col. 5, ll. 59–60. The specification further states that the following five components interact to provide the service network functionality: an exchange, an operator agent, a management agent, a management manager, and a graphical user interface. *Id.* at col. 6, ll. 1–5.

The difference between the prior art subject matter of Figure 4A and the embodiment of the invention in Figure 4B is shown in the “Service Channels.” In addition to the service channels in Figure 4A, Figure 4B illustrates a TransWeb Exchange³ that includes a Web page and point-of-service (POSvc) applications. The ’492 Patent states: “A POSvc application is an application that can execute the type of transaction that the user may be interested in performing.” *Id.* at col. 6, ll. 41–43. The type of services offered by a POSvc application is determined by each Web merchant. *Id.* at col. 7, ll. 10–11, 24–25.

The Exchange can reside on a web server or on a separate computer system on the Internet with an Internet address. *Id.* at col. 6, ll. 25–28, 58–64. The Exchange conceptually includes a switching component and an object routing component, *id.* at col. 6, ll. 20–21, and may also include an operator agent that interacts with a management manager, *id.* at col. 6, ll. 28–30. As previously noted, the switching site need not be a Web server but may include non-Web network computer sites and cellular provider sites. *Id.* at col. 5, l. 64–col. 6, l. 1.

When the Exchange receives a consumer’s request for a transactional application, a graphical user interface displays on a Web page, a list of POSvc applications from which the user may select. *Id.* at col. 6, ll. 39–55. The ’492 Patent discloses that the embodiment of the invention supports hypertext markup language (HTML), Virtual Reality Markup Language, Java™, and other graphical user interface standards. *Id.* at col. 6, ll. 45–50.

³ The ’492 Patent refers to a TransWeb Exchange in Figure 4 and at column 7, lines 63–65 describe the TransWeb™ Exchange as a proprietary protocol. Elsewhere, the ’492 Patent uses the term Exchange.

By selecting a POSvc to activate, the user can access services and perform transactions offered by that POSvc application, which can access back-office data repositories. *Id.* at col. 6, l. 65–col. 7, l. 4.

The '492 Patent states that the connection between the user and the services is managed by the Exchange, through an operator agent on a Web server that ensures the availability of distributed functions and capabilities. *Id.* at col. 7, ll. 4–9. However, as noted above, the '492 Patent emphasizes that the Exchange may reside on a Web server or on a separate computer system with an Internet address. *Id.* at col. 6, ll. 25–28, 58–64. The '492 Patent also states that a management manager, which may be on the Exchange or on a separate computer system on the Internet, interacts with the operator agent on the Exchange. *Id.* at col. 7, ll. 56–61.

The Exchange and a management agent may act in various roles, including client–server, peer–to–peer, or master–slave roles, and constitute a value-added network (“VAN”) switch. *Id.* at col. 7, ll. 52–56. The VAN switch provides multiprotocol object routing, depending on the VAN services chosen, using a proprietary protocol, the TransWeb™ Protocol (“TMP”). *Id.* at col. 7, ll. 62–65. However, the '492 Patent does not describe TMP, except to state that it incorporates the same security features as the traditional Simple Network Management Protocol (“SNMP”). *Id.* at col. 7, ll. 62–67. In addition, according to the '492 Patent, TMP can incorporate s-HTTP, Java™, the WinSock API, or ORB with distributed on-line service information bases (DOLSIBs) to perform object routing. *Id.* at col. 8, ll. 4–8. Thus, object routing in the '492 Patent is not limited to a specific implementation. The '492 Patent, however, does not provide a description of the proprietary TMP and how TMP incorporates these alternative technologies.

In describing the DOLSIB, the '492 Patent states that networked object identities, each of which is assigned an Internet address based on the IP address of the node at which the networked object resides, identify information entries and attributes in the DOLSIB. *Id.* at col. 8, ll. 8–15. The Internet address assigned to a networked object identity branches in a hierarchical tree structure from a node, such as a Web server, and establishes the object as IP reachable. *Id.* at col. 8, ll. 16–23. The proprietary TMP utilizes this Internet address to uniquely identify and access the object from the DOLSIB, although the mechanism TMP uses to accomplish this task is not described. *Id.* at col. 8, ll. 24–26. Each object has a name, a syntax that defines the abstract data structure corresponding to that object, and encoding that defines how the object is represented by the object type syntax while being transmitted over the network. *Id.* at col. 8, ll. 27–39. The '492 Patent does not describe the syntax or encoding of objects.

The '492 Patent also discusses a conceptually layered architecture of the VAN switch in the context of “services.” *Id.* at col. 8, ll. 41–43. It is not clear if the “services” in this conceptually layered architecture constitute the “service network” previously discussed. However, the '492 Patent provides no physical description of such a network.

A “boundary service” interfaces the VAN switch, the Internet and the Web and end user media devices, e.g., PCs, television, telephones, as well as interfacing to an on-line service provider. *Id.* at col. 8, ll. 43–48. As an OSI application layer switch, the “switching service” represents the core of the VAN switch and facilitates connectivity with the Internet (a public switched network) and private networks, including back office networks. *Id.* at col. 8, ll. 52–60. The switching service routes user connections to remote VAN switches, multiplexes, and prioritizes requests and provides flow control. *Id.* at col. 8, ll. 54–59. Users use

“management services” to manage network resources and perform administrative and maintenance functions. *Id.* at col 8, l. 64–col. 9, l. 8.

The “application service” contains application programs that deliver customer services, such as POSvc applications. *Id.* at col. 9, ll. 9–12. We note that the terms “application service” and “VAN service” are referenced in the ’492 Patent using reference designator 704. As mentioned above, the ’492 Patent describes “services” of the layered architecture of a VAN switch. The description of the “VAN service” as providing functions, including communication services, for both management and end users of the network, *id.* at col. 9, ll. 20–23, indicates that the functions carried out by the VAN switch may be carried out in a POSvc application. However, the type of customer services offered by a POSvc application is determined by each Web merchant. *Id.* at col. 7, ll. 10–11, 24–25. Thus, as opposed to the VAN service, the “application service” is the service being provided by the application, e.g., desired banking functions, rather than a switching or communications functions.

ILLUSTRATIVE CLAIM

1. A configurable value-added network switch for enabling real-time transactions on a network, said configurable value-added network switch comprising:
 - means for switching to a transactional application in response to a user specification from a network application, said transactional application providing a user with a plurality of transactional services managed by at least one value-added network service provider, said value-added network service provider keeping a transaction flow captive, said plurality of transactional services being performed interactively and in real time;
 - means for transmitting a transaction request from said transactional application; and
 - means for processing said application transaction request.

Ex. 1001, col. 9, ll. 44–57.

CLAIM CONSTRUCTION

In an *inter partes* review, claim terms in an unexpired patent are interpreted according to their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2012). Claim terms also 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). Particular embodiments appearing in the written description are not read into a claim if the claim language is broader than the embodiment. *See In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993) (“[L]imitations are not to be read into the claims from the specification.”).

One characteristic that permeates Patent Owner’s proposed constructions is the attempt to read large portions of the specification into each term to be construed. We address the terms that are material to our decision below.

(Value Added Network) VAN switch

We provided an extensive analysis of this term in our Final Written Decision in IPR2013-00194 and we adopt the same construction in this proceeding. *See SAP Am., Inc. v. Arunachalam*, Case IPR2013-00194, slip op. at 10-11 (PTAB Sep. 18, 2014) (Paper 67). Thus, we construe the VAN switch to mean *an OSI application layer switch that has a switching component, management and object routing component*.

Transactional application

In our Decision to Institute in this proceeding, we construed this term to mean *an application accessed by a user to perform a commercial or other type of interaction*. Dec. to Inst. 15. Patent Owner argues that we should construe the term to mean an application that performs such an interaction because access by a user is not part of the term to be construed. We decline to adopt Patent Owner's construction because an application does not perform a transaction unless it is accessed by a user. Therefore, we apply the construction we adopted in our Decision to Institute.

Value-added network service provider

In our Decision to Institute in this proceeding, we construed this term to mean *a provider of services, other than underlying network communication services, on a network*. Dec. to Inst. 15. Patent Owner contends that this term should be construed as “provider of a VAN service 704 or POSvc application on a Web page.”⁴ PO Resp. 15. Arguing that “VAN service 704” is “POSvc application displayed on a Web page and offered as an online service over the Web” (*id.*), Patent Owner appears to argue that this term should be construed to mean “provider of a POSvc application displayed on a Web page and offered as an online service over the Web or POSvc application on a webpage.” In our Final Written Decision in IPR2013–00194, we noted that the Specification refers to both Application service 704 and VAN service 704. In the present proceeding, Patent Owner refers to application service 704 as including POSvc applications offered as online services over the Web and being the core component of VAN service 704,

⁴ We provide an extensive analysis of POSvc application in our Final Written Decision in IPR2014-00194. *See, SAP Am. Inc. v. Arunachalam*, Case IPR2013-00194, slip op. at 14-16 (PTAB Sep. 18, 2014) (Paper 67).

as well as the core component of the VAN switch. *Id.* at 17. None of this is clear from the Specification. The Specification discloses that application service 704 includes application programs, such as POSvc applications, Ex. 1001, col. 9, ll. 2–3, which can execute the type of transaction the user is interested in performing, *id.* at col.6, ll. 30–32, while VAN service 704 provides functions including communication services for management and end-users of the network and control for the user over the user’s environment, *id.* at col. 9, ll. 13–16. It also is not clear from the Patent Owner’s arguments how any of this is related to the provider, i.e., the party who provides the value-added network. It is clear from the Specification that the value-added network provider does not provide the underlying Internet communication services. Thus, we decline to adopt Patent Owner’s construction, and construe the term “value-added network provider” to mean *a provider of services, other than underlying communication services, on a network.*

PATENT OWNER’S ATTEMPT TO ANTEDATE CHELLIAH

The Patent Owner Response states that Chelliah does not qualify as prior art under 35 U.S.C. § 102(e), but makes no specific arguments in support of that position. PO Resp. 1. Instead, Patent Owner cites Exhibit 2007. *Id.* Exhibit 2007, is a 150-page declaration of Dr. Lakshmi Arunachalam (“Inventor’s Declaration”) and a 13-page list of Exhibits, citing 108 separate Exhibits, Exhibits 2010-2118, some of which are quite lengthy and repetitive of others. In the absence of any argument in the Patent Owner Response, Patent Owner leaves it to the Panel to assess the issue, based on this declaration and the accompanying Exhibits. *Id.* In addition, the Patent Owner Response does not map the claims of the ’500 Patent or proposed Substitute Claim 6 to the statements in the Inventor’s Declaration. Patent Owner should not expect this panel to sort through hundreds, if not thousands, of

pages of testimony and Exhibits without some direction as to how the subject matter supports Patent Owner's assertions.

The exhibits attached to the inventor's declaration make numerous references to "Cyberman." For example, at page 67–69, Exhibit 2007 references the Cyberman Business Plan Product Description and Technical Approach in Ex. 2010. Exhibit 2010 is dated August 26, 1995, three days before Chelliah's August 29, 1995 filing date. Although the first page of Ex. 2010 has a type written date of August 26, 1995, a handwritten note indicates that the document was modified on September 4, 1995. We do not know who modified the document or the extent of the modifications. Thus, Exhibit 2010 does not reveal what existed on August 26, 1995, or who conceived of the subject matter.

Patent Owner also fails to establish how the technical disclosures in the Exhibits correspond to the claimed subject matter, especially with respect to Patent Owner's proposed claim constructions and Motion to Amend. For example, as we have previously discussed, Patent Owner has argued that a Web application, such as a POSvc application, should be construed to mean a web client in a web browser. Patent Owner proposed similar language in its Motion to Amend. In contrast, Exhibit 2010 describes Cyberman using a Manager-Agent model to implement two way communications by employing a Cybermanager in-home banking application that resides at a bank's Web site. This suggests that the application is not a web client in a browser, but resides on the bank's server. Ex. 2010, 29. The Inventor's Declaration also states that Exhibit 2016 shows a Web server for offering one or more Web applications as respective POSvc applications. Ex. 2007 ¶ 12. As we have discussed previously, there is no written description support in the specification for construing a Web application as a client in a Web

browser. The description in the Inventor's Declaration of a Web application residing at a bank's Web site only adds to the confusion.

We further note that the only support for antedating Chelliah is the Declaration of the Inventor, Dr. Lakshmi Arunachalam. Ex. 2007. An inventor "may date his patentable invention back to the time of its conception, if he connects the conception with its reduction to practice by reasonable diligence on his part, so that they are substantially one continuous act." *Mahurkar v. C.R. Bard, Inc.*, 79 F.3d 1572, 1577 (Fed. Cir. 1996) (internal citation and quotations omitted). However, an inventor's testimony alone is insufficient to establish an earlier actual reduction to practice. *Medichem, S.A. v. Rolabo, S.L.*, 437 F.3d 1157, 1170 (Fed. Cir. 2006). An inventor's testimony, standing alone, also is insufficient to prove conception, as some form of corroboration is required. *Mahurkar*, 79 F.3d at 1577; *Price v. Symsek*, 988 F.2d 1187, 1194 (Fed. Cir. 1993).

The requirement for corroboration of inventor's testimony arose out of a concern that inventors testifying at trial would be tempted to remember facts favorable to their case by the lure of protecting their patent or defeating another's patent. *Mahurkar*, 79 F.3d at 1577. The inventor's testimony, that she is the CEO of Patent Owner, Ex. 2007 ¶ 2, and the inventor of the '500 Patent, *id.* ¶ 5, demonstrates that the inventor is an interested party.⁵

"Conception must be proved by corroborating evidence which shows that the inventor disclosed to others his completed thought expressed in such clear terms as to enable those skilled in the art to make the invention." *Coleman v. Dines*, 754 F.2d 353, 359 (Fed. Cir. 1985) (internal quotations and citations omitted). A rule of reason applies to determine whether the inventor's testimony

⁵ Since executing the Declaration, ownership of the patent has been transferred to the inventor.

has been corroborated. *Price*, 988 F.2d at 1195. “The rule of reason, however, does not dispense with the requirement for some evidence of independent corroboration.” *Coleman*, 754 F.2d at 360. An inventor’s own testimony does not constitute “independent” corroboration of evidence that stems from the inventor himself or herself. *In re NTP, Inc.* 654 F.3d 1279, 1291–92 (Fed. Cir. 2011) (concluding that an inventor cannot rely on uncorroborated testimony to establish a prior invention date and rejecting the contention that an inventor may seek to corroborate his testimony with a document and, at the same time, attempt to corroborate the date of the document with his testimony). Patent Owner identifies no evidence to corroborate independently the inventor’s testimony as to conception date or diligence to reduce the invention to practice.

In view of the above, Patent Owner has failed to provide sufficient evidence to establish either conception or diligence to reduce the invention to practice before the critical date.

ANTICIPATION OF CLAIMS 1–6, 10–12, 14–17, AND 35 BY CHELLIAH

Claim 1

Claim 1 recites a configurable value-added network switch (VAN switch) for enabling real time transactions on a network. Patent Owner contends that Chelliah does not disclose the claimed value added network switch recited in the challenged claims because the VAN switch should be construed to include a POSvc application, which is a Web application, and therefore is an application that is a web client in a Web browser. PO Resp. 28–42. Patent Owner repeats many of the arguments it made in CBM2013-00013, which Patent Owner referenced in IPR2013-00194. We addressed this contention in IPR2014–00194 and determined

that Chelliah discloses the claimed VAN switch. *SAP Am. Inc. v. Arunachalam*, Case IPR2013-00194, slip op. at 23 (PTAB Sep. 18, 2014) (Paper 67). We address the individual elements of claim 1 below.

In arguing that Chelliah does not disclose the recited means for switching to a transactional application in response to a user request from a network application, Patent Owner contends that Chelliah does not disclose a network application or a means for switching to a network application. PO Resp. 42. As we noted on page 16 of our Decision to Institute, the '500 Patent does not describe a “network application.” Patent Owner does not dispute our construction of network application as meaning *an application from which a user can request or specify a transactional application*. Dec. to Inst. 16. Patent Owner argues that, because in Chelliah a user selects a storefront or an item on display, the user does not select a transactional application. PO Resp. 42. We have construed a transactional application as *an application accessed by a user to perform a commercial or other type of interaction*. Dec. to Inst. 15. In Chelliah, when a user enters the Electronic Mall, the user can select an Electronic Storefront. Ex. 1003, col. 6, ll. 26–40. Chelliah’s Electronic Storefronts initiate processing allowing that user to perform a commercial or other type of interaction. Thus, Chelliah discloses the network application and a means for switching to a transactional application.

Patent Owner also contends that Chelliah does not disclose an added value network service provider keeping a transaction flow captive. PO Resp. 43–48. We have construed a value-added service network provider to mean *a provider of services, other than underlying network communication services, on a network*. Dec. to Inst. 15. In Chelliah, the operator of an Electronic Store provides such services, using a software program that conducts a transaction using objects according to the common object request broker architecture (“CORBA”) Ex. 1003,

col, 9, ll. 30–48. As discussed above, the Electronic Storefront uses these various software objects to maintain control over the steps used to carry out a transaction from start to finish, thus keeping the transaction flow captive as claimed.

Patent Owner contends that “Chelliah does not teach or disclose [a] value-added network (VAN) switch—means for transmitting a transaction request from said transactional application,” (PO Resp. 48), or a “VAN...—switch means for processing said transaction request,” (*id.* at 50). We note that claim 1 recites transmitting a transaction request, but claim 1 does not recite the source or the destination of the transaction request. Patent Owner argues that Chelliah offers the user a choice of storefronts, rather than a choice of POSvc applications on a Web page or web applications that run web clients as a Web browser. *Id.* at 49–50. We addressed this issue above, and in IPR2013-00194, and determined that Chelliah discloses the claimed VAN switch. In this proceeding, Patent Owner argues that Chelliah does not disclose POSvc applications on a Web page or the Exchange. However, as previously discussed, in Chelliah, a user enters the Electronic Mall and selects from a number of available Electronic Storefronts. Consistent with our construction of POSvc application, in Chelliah, processing then is transferred to the selected Electronic Storefront to execute the transactions the user is interested in performing. Thus, Chelliah discloses the recited means for transmitting a transaction request. Chelliah then discloses various processing performed, for example, using internal and external commerce systems, to process the transaction request.

Having reviewed all of Petitioner’s assertions in support of its challenge, and Patent Owner’s arguments against Petitioner’s challenge, and the evidence cited by the parties, we are persuaded that each of the elements of claim 1 is disclosed in

Chelliah. We conclude that Petitioner has shown by a preponderance of the evidence that Chelliah anticipates claim 1 and that claim 1 is unpatentable.

Claims 2 and 11

Patent Owner contends that, because Chelliah does not disclose a VAN switch, Chelliah does not disclose an interface between a VAN switch and the Web. PO Resp. 52. Patent Owner also asserts that Chelliah and CORBA do not disclose the “user specified transactional application.” *Id.* Patent Owner argues, without citing any testimonial support, that it was “well-known in 1995” that CORBA did not provide any interface to the Web or to POSvc applications (a term admittedly coined by Patent Owner) displayed on a Web page or displaying an object data structure with information entries and attributes in a POSvc application. *Id.* Chelliah discloses that the Electronic Mall can be accessed by a customer from an on-line service provider or a Web site using a WWW browser application. Ex. 1003, col. 12, ll. 1-9. The user’s selection of an Electronic Storefront provides a channel through which a Web user can conduct transactions while the operator of the Electronic Storefront can access back-end systems necessary to facilitate the transaction. Thus, we conclude that Chelliah discloses the features recited in claim 2 and 11.

Claims 3 and 12

Patent Owner contends that Chelliah does not disclose a means for activating said transactional application that includes a means for creating a transaction link between said network application and said transactional application. PO Resp. 53. Patent Owner repeats its argument that Chelliah does not disclose displaying a transactional or POSvc application on a Web page. *Id.* at 54. We have already addressed that argument and determined that Chelliah discloses this feature. Patent Owner notes that at page 22 of our Decision to Institute, we construed the means

for creating a transaction link to mean an object routing component and argues that object routing involves the use of DOLSIBs, not disclosed in Chelliah. *Id.* As discussed in our review of the patent specification, however, the '500 Patent does not limit object routing to such a specific implementation. We conclude that the extensive use of objects to transfer processing and control in Chelliah disclose the claimed means for creating a transaction link.

Claims 4 and 14

Patent Owner contends that Chelliah does not disclose the means for presenting the user with a list of transactional application and the means for submitting the user's specification of a transactional application based on the user's selection, because Chelliah offers only the choice of storefronts or items in display, not a display of transactional applications. PO Resp. 54–55. We have already declined to adopt Patent Owner's position in this Final Written Decision and conclude that Chelliah discloses this feature.

Claims 5 and 15

Patent Owner contends that Chelliah does not disclose the recited means for processing a transaction request as comprising means for coupling the transmitting means to a host means, because Chelliah does not disclose POSvc applications on a Web page, hence Chelliah does not disclose the Exchange or a request from a transaction application. PO Resp. 56. As discussed above, we have declined to adopt Patent Owner's position that Chelliah does not disclose POSvc applications or the Exchange, which Chelliah implements using an Electronic Mall allowing a user to select an Electronic Storefront that permits the user to conduct a transaction. Thus, we conclude that Chelliah discloses the features recited in claims 5 and 15.

Claims 6 and 16

Claims 6 and 16 recite that the host means contains data corresponding to the transaction request. Patent Owner does not dispute that this is disclosed in Chelliah and argues only that Chelliah does not disclose a VAN switch. PO Resp. 57. As discussed above, we decline to adopt Patent Owner's position with respect to Chelliah's disclosure of the VAN switch. Therefore, we conclude that Chelliah discloses the features recited in claims 6 and 16..

Claim 17

Claim 17 recites that the value-added network service providers cooperate to provide a plurality of transactional services to a user. Patent Owner contends that Chelliah does not disclose or teach "value-added network service providers," "value-added network switch," a "POSvc application displayed on a Web page," or "VAN service 704." PO Resp. 57. We have declined to adopt Patent Owner's position on each of these issues. Chelliah discloses External Commerce Systems offered by providers of services, other than underlying network communication services, on a network. See Ex. 1003, col. 8, ll. 51–64; col. 10, l. 44–col. 11, l. 60. Thus, we conclude that the features of claim 17 are disclosed by Chelliah.

Claim 35

Claim 35 is drawn to a system comprising the means for switching and means for transmitting previously discussed with respect to claim 1, the means for activating previously discussed with respect to claim 3, and a host means for processing the transaction request and retrieving data corresponding to the transaction request. In our Decision to Institute, we construed the host means to mean a back office processor including related information bases. As discussed above, in the system disclosed by Chelliah, such a back office processor, including a related information base, is disclosed, e.g., by External Payment Handler 126, which is called by Payment Handler Interface 124.

In consideration of the above, we conclude that Petitioner has shown by a preponderance of the evidence that claims 1-6, 10-12, 14-17, and 35 are anticipated by Chelliah and, thus, are unpatentable.

MOTION TO AMEND

Patent Owner moves to amend claim 6. Mot. to Amend 3-6. Patent Owner's Motion to Amend claim 6 is not in proper form because it fails to identify the amended claim as a substitute claim. In an *inter partes* review, a patent owner may cancel a challenged claim or propose a reasonable number of substitute claims. 35 U.S.C. § 316(d); 37 C.F.R. § 42.121(a)(3). There is no provision for amending an existing claim. The applicable presumption is that only one substitute claim would be needed to replace each challenged claim, although the presumption may be rebutted by a demonstration of need. *Id.* Rather than deny the motion on this basis, we designate Patent Owner's amended claim 6 as substitute claim 36.

A motion to amend claims must clearly identify the written description support for the proposed substitute claims. The written description test is whether the original disclosure of the application relied upon reasonably conveys to a person of ordinary skill in the art that the inventor had possession of the claimed subject matter as of the filing date. *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). Pursuant to 37 C.F.R. § 42.121(b)(1), Patent Owner must set forth the support in the *original disclosure* of the patent for each proposed substitute claim, i.e., Patent Owner must identify clearly the written description support in the disclosure corresponding to the earliest date upon which Patent Owner seeks to rely. In this case, Patent Owner cites to the parent U.S. Patent No. 5,778,178 ("the '178 Patent"), which issued on July 7, 1998, and provisional application 60/006,634 ("the Provisional Application") filed on November 13, 1995. Mot. to Amend 5.

Patent Owner does not map the new claim limitations in substitute claim 36 to the disclosure in the '178 Patent or to the Provisional Application, providing only a list of pages where the support for the new limitations can be found. Mot. to Amend 5. Patent Owner also incorporates into substitute claim 36 language that is not in the '500 Patent. Merely indicating where each claim limitation individually is described in the original disclosure may be insufficient to demonstrate support for the claimed subject matter as a whole. While the proposed substitute claims need not be described verbatim in the original disclosure in order to satisfy the written description requirement, if the claim language does not appear in the same words in the original disclosure, a mere citation to the original disclosure, without any explanation as to why a person of ordinary skill in the art would have recognized that the inventor possessed the claimed subject matter as a whole, may be inadequate. *See Nichia Corp. v. Emcore Corp.*, Case IPR2012-00005 (PTAB June 3, 2013) (Paper 27). On April 24, 2014, Patent Owner resubmitted as Exhibit 2139 a 62-page chart purporting to demonstrate support for each of the added claim limitations that we previously ruled was inappropriate (Paper 27, "Order to Correct Papers"). *See* Paper 44 ("Patent Owner's Reply to Petitioner's Opposition to Motion to Amend"). On April 30, 2014, we expunged Exhibit 2139 as not appropriate in this proceeding. Paper 45.

Substitute claim 36 recites the added limitation that "each of said point-of-service applications being a Web application that is a Web client in a Web browser." Mot. to Amend 3. We addressed this proposed language at length in our construction of Web application in our Final Written Decision in IPR2013-00194, *SAP America v., Arunachalam*, Case IPR2013-00194, slip op., at 11-14 (PTAB Sep. 18, 2014) (Paper 67), and concluded that it is not supported by the written description of the '492 Patent, whose specification is identical to that of the

'500 Patent. The same analysis applies here. Patent Owner has not identified any further written description support in the '178 Patent or the Provisional Application for the proposed language.

Petitioner also notes that there is no disclosure in the '500 Patent that supports the newly added limitation that the individual networked objects are transactional object data structures. Opp. to Mot. to Amend 6. We agree with Petitioner that there is no written description in the '500 Patent of a "transactional object data structure." The Specification states that the syntax of an object defines the abstract data structure corresponding to that object type, (Ex. 1001, col. 8, ll. 27–29), but does not mention a transactional object or describe a data structure for a transactional object.

If we are unable to determine how the Specification and drawings support the proposed substitute claims, the motion to amend may be denied. Office Trial Practice Guide, 77 Fed. Reg. at 48,767. Therefore, we deny Patent Owner's Motion to Amend as failing to comply with the written description requirements of 35 U.S.C. § 112.

PETITIONER'S MOTION TO EXCLUDE

Petitioner moves to exclude certain documents as not authenticated or hearsay. Paper 47 ("Mot. to Exclude"). Specifically, Petitioner argues that we should exclude Exhibits 2120 (W3C Tenth Anniversary time line), 2121 (The History of HTML), and 2125 (a printout from Dr. Dobbs Journal on CD ROM, purporting to be an HTML tutorial) as unauthenticated and hearsay. Mot. to Exclude 1–4. Patent Owner opposes, citing case law where, based on the characteristics of the website, courts have held such documents to be sufficiently authenticated. Paper 50 ("Opp. to Mot. to Exclude" 1–5). Petitioner argues that the issue is whether these particular documents are authenticated and that Patent

Owner's sole attempt to authenticate, a statement by the inventor that each of the exhibits is a true, authentic, and correct copy of the original document, is insufficient for authentication. Paper 52 ("Pet. Reply to Opp.") 1–3.

Under Federal Rule of Evidence ("FRE") 901(b)(1), a proponent may authenticate evidence through testimony that the evidence is what it is claimed to be. In *Lorraine v. Markel American Insurance Co.*, 241 F.R.D. 534 (D.Md. 2007), the court noted that a witness authenticating electronic evidence must "provide factual specificity about the process by which the electronically stored information is created, acquired, maintained, and preserved without alteration or change, or the process by which it is produced if the result of a system or process that does so." *Id.* at 545. The inventor's statements do not meet these criteria.

However, under FRE 901(b)(4), a party may authenticate evidence using circumstantial evidence in conjunction with the appearance, contents, substance, internal patterns, or other distinctive characteristics of the evidence. Although Patent Owner has not provided evidence such as hash values or metadata, *see Lorraine*, 241 F.R.D. at 547, the contents and substance of the documents indicate that they are what they purport to be. Patent Owner points to circumstantial evidence, including dates, websites, trademarks, copyright notices, and URL links. Opp. to Mot. to Exclude 2–4. Petitioner disputes that these indicia sufficiently authenticate the documents. Paper 59. However, the declarant inventor was subject to cross examination on the Inventor's Declaration and the exhibits. While the circumstantial evidence is thin, given the technical nature of the documents, this panel can assess their authenticity and assign them appropriate weight.

Patent Owner also argues that these exhibits are not hearsay, arguing that they are offered in the context of claim construction to establish what the Exhibits teach about how a person of ordinary skill would interpret the exhibits. Opp. to

Mot. to Exclude 4. Patent Owner cites *Neev v. Abbott Med. Optics, Inc.*, CIV. 09-146 RBK, 2012 WL 1066797 at *14 (D. Del. Mar. 26, 2012) (citing *Abbott Labs v. Diamedix Corp.*, 969 F. Supp. 1064, 1066 n.1 (N.D. Ill. 1997)), to support the proposition that evidence proffered to establish the effect on a person of ordinary skill in the art is not hearsay. *Id.* In view of the circumstances, the panel can assess the proper weight to be given these exhibits, and the Motion to Exclude Exhibits 2120, 2121, and 2125 is denied. Our Final Written Decision in this proceeding does not cite Exhibits 2120, 2121 or 2125.

Petitioner also moves to exclude Exhibits 2010–2118, filed in support of the Inventor’s Declaration, as inadmissible hearsay, because they are out of court statements offered to prove the truth of the matter asserted and not covered by a hearsay exception, such as the business records exception, or are documents prepared in the course of litigation. Mot. to Exclude 4–8. Patent Owner argues that these exhibits are not being offered to prove the truth of the matters asserted, but for what the exhibits describe. Opp. to Mot. to Exclude 6. However, what the exhibits describe are technical features upon which the inventor relies to prove an earlier date of conception and reduction to practice. Petitioner argues that Patent Owner uses the dated documents to establish a date of conception and that Patent Owner should not be allowed to rely on these documents absent a hearsay exception. Pet. Reply 4–5.

Exhibits 2010–2118 are out of court statements. The matter asserted in the Inventor’s Declaration is the inventor’s purported conception and reduction to practice before the critical date in order to antedate Chelliah. Thus, Exhibits 2010–2118 facially appear to be hearsay. The Exhibits are not business records, as there is no testimony by a records custodian that they were routinely kept in the ordinary course of business or that making such records was a regular practice. *See*, Fed. R.

Evid. 803(6). However, Exhibits 2010–2118 are provided to support and explain the direct testimony in the Inventor’s Declaration, which refers to Exhibits 2010–2118 extensively. The declarant inventor testifies that she prepared each and every one of Exhibits 2010–2118. Ex. 2007 ¶ 7. The Declarant Inventor was subject to cross-examination on the Inventor’s Declaration and Exhibits 2010–2118. We do not exclude them as inadmissible hearsay.

A hearsay statement need not be excluded if the statement has circumstantial guarantees of trustworthiness, is offered as evidence of a material fact, is more probative on the point for which it is offered than any other evidence the proponent can obtain through reasonable efforts, and if admitting it will serve the interests of justice. Fed. R. Evid. 807(a). Although the Inventor’s Declaration is not corroborated, raising some doubts as to its trustworthiness, the Panel can assess that issue. The exhibits are offered as evidence of material fact and are probative of the subject matter the inventor claims to have invented. While the Declarant Inventor may have been able to obtain other evidence that is more probative concerning the actual date of invention, we do not know that the Declarant Inventor could have obtained more probative evidence concerning the actual subject matter purportedly conceived by the inventor. It is within our discretion to assign the appropriate weight to be accorded to evidence. *See, e.g., Yorkey v. Diab*, 601 F.3d 1279, 1284 (Fed. Cir. 2010) (holding the Board has discretion to give more weight to one item of evidence over another “unless no reasonable trier of fact could have done so”); *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1368 (Fed. Cir. 2004) (“[T]he Board is entitled to weigh the declarations and conclude that the lack of factual corroboration warrants discounting the opinions expressed in the declarations”). As discussed above, we have given appropriate weight to the Inventor’s Declaration and Exhibits 2010-2118.

We deny Petitioner's Motion to Exclude.

ORDER

In consideration of the above, it is

ORDERED that, based on Petitioner's showing by a preponderance of the evidence, claims 1–6, 10–12, 14–17 and 35 are unpatentable;

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

FURTHER ORDERED that Petitioner's Motion to Exclude 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.

PETITIONER:

Lori A. Gordon
Michael Q. Lee
Sterne, Kessler, Goldstein & Fox P.L.L.C.
1100 New York Avenue, NW
Washington, DC 20005
Lgordon-ptab@skgf.com
Mlee-ptab@skgf.com

PATENT OWNER

Lakshmi Arunachalam (*pro se*)
laks22002@yahoo.com