

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAP AMERICA, INC.,
Petitioner,

v.

LAKSHMI ARUNACHALAM,
Patent Owner.

Case IPR2013-00194
Patent 8,108,492 B2

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
37 C.F.R. § 42.73

BACKGROUND

On September 19, 2013, we entered a Decision to Institute a trial in each of 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”), *SAP America, Inc. v. Pi-Net International, Inc.*, Case IPR2013–00195, which concerns U.S. Patent No. 5,987,500 (“the ’500 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 (IPR2014–00194), we instituted trial on the following grounds:

Claims 1–7, 10, and 11 as anticipated under 35 U.S.C. §102 by Chelliah²;

Claim 8 as obvious under 35 U.S.C. § 103 over the combination of Chelliah and Electronic Banking;³ and

Claim 12 as obvious under 35 U.S.C. § 103 over the combination of Chelliah and Valentino.⁴

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. 1004”).

³ Allen H. Lipis, et al., *Electronic Banking, The Stock Market*, 4th Edition, John Wiley & Sons, New York (1985) (“Ex. 1006”). In different related proceedings, this reference is designated by the parties as both “Lipis” and “Electronic Banking.” In this decision, we refer to this reference as Electronic Banking.

⁴ U.S. Patent No. 4,648,037, issued Mar. 3, 1987 (“Ex. 1007”).

Patent Owner filed a Corrected Patent Owner Response, Paper 34 (“PO Resp.”), and a Corrected Motion to Amend, Paper 37 (“Mot. to Amend”). SAP America, Inc. (“Petitioner”) filed responsive pleadings, Paper 47 (“Pet. Reply”) and Paper 48 (“Opp. to Mot. to Amend”) and a motion to exclude certain exhibits, Paper 54 (“Mot. to Exclude”), which Patent Owner has opposed, Paper 57 (“Opp. to Mot. to Exclude”). Although the parties initially requested an oral hearing, on June 3, 2014, both parties jointly moved to withdraw their requests for oral hearing (Paper 60).

In this Final Written Decision, we conclude that Patent Owner has failed in its attempt to antedate Chelliah, and that Petitioner has proven by a preponderance of the evidence that all of the challenged claims are unpatentable. We also deny Patent Owner’s Motion to Amend and deny Petitioner’s Motion to Exclude.

THE ’492 PATENT

Although our Decision to Institute includes a description of the ’492 Patent, in this Final Written Decision we review features described in the ’492 Patent that may be material to this decision.

The ’492 Patent purports to provide “a method and apparatus for providing real-time, two-way transactional capabilities on the Web.” Ex. 1001, 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. Ex. 1001, 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 Exchange⁵ 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,

⁵ The '492 Patent refers to a TransWeb Exchange in Figure 4 and at column 7, lines 63-65 describes the TransWeb™ Exchange as a proprietary protocol. Elsewhere the '492 Patent uses the term Exchange.

the switching site need not be a Web server but may include non-Web network computer sites and cellular provider sites. Ex. 1001, 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.

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.* 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. 62–66. 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. Ex. 1001, col. 8, ll. 4–7. 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. 25–27. 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. Ex. 1001, col. 8, ll. 43–47. 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. 52–54. 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 7, l. 64–col. 8, 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

Claim 1 is illustrative:

1. A system, comprising:
a Web server, including a processor and a memory, for offering one or more Web applications as respective

point-of-service applications in a point-of-service application list on a Web page;
each Web application of the one or more Web applications for requesting a real-time Web transaction;
a value-added network (VAN) switch running on top of a facilities network selected from a group consisting of the World Wide Web, the Internet and an e-mail network, the VAN switch for enabling the real-time Web transactions from the one or more Web applications;
a service network running on top of the facilities network for connecting through the Web server to a back-end transactional application; and
a computer system executing the Back-end transactional application for processing the transaction request in real time.

Claim 10 is drawn to a method and claim 12 is drawn to a computer implemented system.

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) (“limitations 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. Thus, Patent Owner proposes to construe the recited service network to

contain all functionality of the VAN switch and the VAN switch to include the functions performed by the POSvc applications. Taken to their logical conclusions, adopting many of Patent Owner's proposed constructions leave little, if any distinction between the VAN switch, the service network, or the POSvc applications recited in the claims. We address the terms that are material to our decision below.

Value-added network service

Neither the Petition ("Pet.") nor the Patent Owner Preliminary Response, Paper 10 ("Prelim. Resp."), in this proceeding proposed a construction for "value-added network (VAN) service." In its Corrected Patent Owner Response, Patent Owner proposes that "value-added network service" be construed to mean "a point of service application displayed on a Web page and offered as an online service over the Web." PO Resp. 1-2. Petitioner contends that Patent Owner's construction is inconsistent with the examples of VAN services in the '492 specification. Pet. Reply 2. Petitioner argues that no construction is necessary but, if necessary, the term should be construed as a service associated with a packet-switched network, e.g., the Internet, other than the underlying packet-switched network of the communication service. *Id.*

Patent Owner's proposed construction defines VAN "services" as an "application," specifically a point-of-service ("POSvc") application. An "application," however, is a computer program and not a service, whether or not the computer program adds value. The '492 Patent refers to POSvc applications as an "application programs that deliver customer services." Ex. 1001, col.9, ll. 912. Patent Owner's proposed construction also does not identify what value is added, or to what entity or device the value is added.

In our Decision to Institute in IPR2013-00195, we noted that the examples in the specification indicate that a “value added service” is a service that could be provided by an application, such as a POSvc application, but is separate from the underlying communications services performed on a network. Thus, in our Decision to Institute in IPR2013–00195, we construed a “value added network service provider” to be “a provider of services, other than underlying network communication services, on a network.” *SAP America, Inc. v. Pi-Net Intl, Inc.*, Case IPR2013–00195, slip op. at 15 (PTAB Sep. 19, 2013) (Paper 9).

In IPR2014–00413⁶, we noted that the patent specification equates “application service 704,” which includes applications, i.e., computer programs, that deliver customer services, with “VAN service 704,” which provides “functions including communications services for both management and end users of the network” and “control for the user over the user’s environment.” *SAP Am.. Inc. v. Pi-Net Int’l.*, Case IPR2014–00413, slip op. at 21–22 (PTAB Aug. 18, 2014), (Paper 12)(citing Ex. 1001, col. 9, ll. 24–27). Noting that the specification leaves the distinction between a POSvc application and a VAN service unclear, we adopted the approach in IPR2013-00195 and construed “value–added network service” to mean *a service other than underlying network communication services on a network. Id.* We apply the same construction in this proceeding.

VAN Switch

In our Decision to Institute, we construed the term “VAN Switch” to mean an OSI application layer switch that has a switching component, management and object routing component. Citing the discussion of VAN service 704, boundary

⁶ IPR2014-00413 involves the same parties as this proceeding and concerns challenges to U.S. Patent No. 8,346,894 B2, which has the same specification as that of the ’492, ’500, and ’158 Patents.

service 701, switching service 702, application service 704, exchange 501, management agent 601, and POSvc applications 510, Patent Owner proposes to further restrict the construction of this term by including in it “an application service which includes one or more POSvc applications.” PO Resp. 3–4. Thus, Patent Owner argues that the VAN Switch should include the POSvc applications.

As discussed above, the reference in the '492 Patent specification to “application service 704” and “VAN service 704” is confusing, at best. However, as previously discussed, the '492 Patent indicates a distinction between a POSvc application, which is an application program that can execute a customer transaction, and the VAN service, which provides communications services, as part of the VAN switch. The specification discloses that application service 704 contains applications, such as POSvc applications that deliver customer services the merchant chooses to provide. Ex. 1001, col. 9, ll. 9–11. Thus, the specification indicates that the VAN switch can be implemented in a POSvc application. However, the service provided by the POSvc application is a transaction that a merchant provides the customer and is not a part of the VAN switch. Therefore, we decline to adopt Patent Owner’s proposed construction and apply the construction we adopted in our Decision to Institute.

Web Application

At the time of our Decision to Institute, neither party had proposed a construction of the term “Web application.” In related proceeding CBM2013-00013, Patent Owner, in a section titled “Web application,” proposed that “a POSvc Application is a Web application displayed on a webpage, corresponding to a back–end transactional application, and displaying ‘object’ data structure with attributes and information entries corresponding to the selected Web transaction request.” *SAP Am., Inc. v. Pi-Net, Int’l.*, Case CBM2013–00013 (PTAB), Paper 13

(“Prelim. Resp.”), 25. Thus, Patent Owner argues that a POSvc is a type of Web application.

In our Decision to Institute in CBM2013–00013, we noted that claim 1 of the ’492 Patent recites offering one or more Web applications as POSvc applications, that neither claim 1 nor the specification of the ’492 Patent defines a Web application, and that the term encompasses more than point–of–service applications. Therefore, we construed the term “Web application” to mean *a software program that can be accessed by an Internet user. SAP Am., Inc. v. Pi-Net Int’l., Inc.*, Case CBM2013–00013 slip op. at 14 (Sept. 19, 2013) (Paper 15).

In CBM2013–00013, Patent Owner modified its position and now contends that “Web application” should be construed as “an application that runs as a Web client in a Web browser.” *SAP Am., Inc. v. Pi-Net Int’l., Inc.*, Case CBM2013–00013, Corrected PO Resp. at 20 (Paper 36, filed Feb. 5, 2014).⁷ In this proceeding, IPR2013–00194, Patent Owner contends that the term “Web application” should be construed to mean “an application that is a Web client in a Web browser.” PO Resp. 4–5.

Patent Owner’s references in the Corrected Patent Owner Response in CBM2013–00013 (Paper 36) to Wikipedia’s description of a Web application, CBM2013–00013, Ex. 2018 (“Wikipedia”) and an article by Daniel Nations on about.com, CBM2013–00013, Ex. 2019, (“Nations”) both fail to address the use of the term “Web application” in the ’492 Patent.

Patent Owner’s proposed construction is inconsistent with the ’492 Patent specification. The ’492 Patent describes that a Web browser typically runs on a user’s machine and therefore functions as a client, while an application that

⁷ Patent Owner’s reference to arguments made in another proceeding is improper. However, we address those arguments here and do not repeat the analysis in other related proceedings.

provides a service typically runs on a machine that hosts a web site and functions as a server. Ex. 1001, col. 1, ll. 49–64. Claim 1 of the '492 Patent recites that the Web server offers the Web applications in a list.⁸ As previously discussed, Figure 4B of the '492 Patent shows an Exchange that includes a Web page and POSvc applications that carry out requested transactions. The '492 Patent discloses that the Exchange can reside on a Web server or a separate computer with an Internet address. *Id.* at col. 6, ll. 25–28, 58–64. Thus, the POSvc application is associated with the server, rather than the client. There is no description in the '492 Patent of a POSvc application running as a client application. At best, the POSvc application is accessible using a client program, such as a Web browser. However, the POSvc application, as described in the '492 Patent, is not a client and does not run in a Web browser.

Patent Owner argues that the construction adopted in CBM2013–00013 does not consider that a data base accessed by a user or internet user is not a Web application, but instead is an application local to the back-end of the enterprise. PO Resp. 5. *See also, SAP Am., Inc. v. Pi-Net Int'l., Inc.*, Case CBM2013–00013 (PTAB), Paper 36 (“Corrected PO Resp.”), 18–24 (filed Feb. 5, 2014). In our Decision to Institute in related case IPR2014-00413, we reconsidered the term “Web application,” as used in the claims of U.S. Patent 8,346,894 (“the '894 Patent”), whose specification is the same as that of the '492 Patent and the '158 Patent, addressed in CBM2013–00013. *SAP Am., Inc. v. Pi-Net Int'l., Inc.*, Case IPR2014-00413, slip op. at 17–18 (PTAB Aug. 18, 2014) (Paper 12). We noted in that decision that an “application” is a computer program to help users perform a certain kind of work, and we construed “Web application” to mean *a computer*

⁸ As discussed further herein, claim 1 does not recite how the POSvc application is offered to the user – thus, access to the POSvc application through a hyperlink is not precluded by the claim.

program to perform a certain type of work using the Web. *Id.* at 18. That construction is applicable to the claims of the '492 Patent as well, and we adopt it in this proceeding.

POSvc Application

Patent Owner also contends that the term “POSvc application” should be construed to mean “a transactional Web application displayed on a Web page, and displaying an object data structure in the Web application with attributes and information entries,” PO Resp. 6, or “a Web application displayed on a Web page that executes the transactions requested by the user,” *id* at 7. Thus, as a Web application, Patent Owner proposes that a POSvc application is an application that is a Web client in a Web browser displayed on a Web page, and displaying an object data structure in the Web application with attributes and information entries. In our Decision to Institute in IPR2014–00194, we construed “POSvc application” to mean *a software program that facilitates execution of transactions requested by a user.* Dec. to Inst. 9–10.

Patent Owner’s newly proposed constructions are not supported by the specification. We have already discussed why a Web application, such as a POSvc application, is not a Web client in a Web browser.

In its Patent Owner Preliminary Response in IPR2013-00013, Patent Owner argued that a key defining aspect of a POSvc application is that it has a transactional data structure, which the Patents call the object. *SAP Am., Inc. v. Pi-Net, Int’l.*, Case CBM2013-00013 (PTAB), Paper 13 (“Prelim. Resp.”), 25. In this proceeding, Patent Owner again argues that POSvc applications are transactional applications with object data structures having attributes and entries. PO Resp. 9–15. We agree that a POSvc application, as that term is used in the '492 Patent, is transactional. Patent Owner’s arguments in the Patent Owner’s Response,

however, do not persuade us that the object data structures having information entries and attributes described in the '492 Patent should be incorporated into the construction of "POSvc application." We declined to apply Patent Owner's similar construction proposals in related proceedings IPR2013-00413 and IPR2013-00414, both of which concern a patent with the same specification as that of the '492 Patent.

The specification of the '492 Patent states that in the VAN switch (not the POSvc application) "one embodiment of the present invention utilizes" a proprietary TMP⁹ and DOLSIBs that have network object identities that identify information entries and attributes in the DOLSIB as individual networked objects, each assigned to an Internet address. Ex. 1001, col. 8, ll. 3-15. The description of the DOLSIB object approach as "one embodiment" does not preclude other embodiments. The specification specifically states that, alternatively, TMP can incorporate s-HTTP, Java™, the WinSock API or ORB with DOLSIBs to perform object routing. *Id.* at col. 8, ll. 3-7. In addition, the discussion of DOLSIB in the '492 Patent is in the context of the VAN switch 520, which provides multi-protocol object routing via the proprietary TMP, rather than a POSvc Web application. Even in the context of the conceptual architecture of the VAN switch described with respect to Figure 7, the '492 Patent states that the "boundary service" interfaces the VAN switch, the Internet and the Web and end user media devices, and that the "switching service," the core of the VAN switch, facilitates connectivity with the Internet and back office private networks. *Id.* at col. 8, l. 41-col. 9, l. 25. The patent specification states that the application service, which includes POSvc applications, delivers customer services. *Id.* at col. 9, ll. 9-12.

⁹ The proprietary TMP protocol is not described in the specification.

In view of the disclosure in the '492 Patent, a POSvc application is not limited to an implementation using DOLSIBs, nor are the claims limited to any particular implementation of object routing.

In IPR2013-00413, we also construed “point-of-service (POSvc) application” to mean *a computer program that can execute the type of transaction the user may be interested in performing*. IPR2014–00413 slip op. 18 (Aug. 18, 2014). We adopt that construction in this proceeding as well.

Service Network (running on top of a facilities network)

In our Decision to Institute, we construed the term “service network” to mean “a network on which services, other than underlying network communication services, are provided.” Dec. to Inst. 20. Patent Owner contends that we should revise our construction to limit the network to one running on the application layer of the OSI model that provides services over the World Wide Web. PO Resp. 16. Patent Owner argues that its proposed construction is supported by language in the specification that states the service network runs on top of a facilities network, namely the Internet, the Web, or e-mail networks. *Id.* at 17. This sentence alone indicates that the service network is not limited to one that provides services over the World Wide Web. In addition, Patent Owner argues that the Internet and the Web are not the same thing. *Id.* at 18. Patent Owner does not identify any particular structure that constitutes the claimed service network or point to any disclosure in the '492 specification that limits the service network to the application layer of the OSI model. *Id.* at 17–18.

As previously discussed, the specification of the '492 Patent states that the service network functionality is provided by five components that interact, i.e., an exchange, an operator agent, a management agent, a management manager, and a graphical user interface. Ex. 1001, col. 6, ll. 1–5. Except for the graphical user

interface, the specification discusses these elements as associated with the VAN switch. The specification states that the exchange creates and allows for the management (or distributed control) of a service network, operating within the boundaries of an IP-based facilities network and that the exchange and the management component, as described in the context of the VAN switch, perform the switching, object routing, application, and service management functions. *Id.* at col. 5, ll. 30–38. The specification also states that the invention is implemented to function as a routing switch in the OSI model’s application layer, which provides a means for application programs to access the OSI environment. There is no mention of the service network being confined to the application layer of the OSI model.

In arguing for a particular construction, Patent Owner glosses over the distinctions between the VAN switch, the service network, POSvc applications and the Exchange. PO Resp. 19. Here, without articulating any difference between VAN services and POSvc applications, Patent Owner argues that “[a] service network provides VAN services or POSvc applications displayed on a Web page as on-line services over the World Wide Web.” *Id.* This description of a “service network” is almost identical to Patent Owner’s proposed construction of “VAN service.” *Id.* at 2. We previously discussed and declined to adopt Patent Owner’s proposed construction of VAN Service as a point of service application displayed on a Web page and offered as an online service over the Web.

According to the ’492 Patent, the VAN switch allows a merchant to provide services using a POSvc application to execute the type of transaction a user is interested in performing. Thus, the service network, as distinguished from the VAN switch that allows facilitates delivery of the service, is a network on which services, other than underlying communication services, are provided.

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 Ex. 2006. *Id.* Exhibit 2006 is a 150 page declaration of 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 ’492 Patent or proposed Substitute Claim 13 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 pages 67–69, Exhibit 2006 references the Cyberman Business Plan Product Description and Technical Approach in Ex. 2010. Ex. 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 Aug. 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, Ex. 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 Ex. 2016 shows a Web server for offering one or more Web applications as respective POSvc applications. Ex. 2006 ¶ 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, Lakshmi Arunachalam. Ex. 2006. 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, is also 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. 2006 ¶ 2, and the inventor of the '492 Patent, *id.* ¶ 5, demonstrates that the inventor is an interested party.¹⁰

“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)(quotations and citation omitted). A rule of reason applies to determine whether the inventor's testimony 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.

¹⁰ Since executing the Declaration, ownership of the patent has been transferred to the inventor.

ANTICIPATION BY CHELLIAH OF CLAIMS 1–7, 10, AND 11

A claim is anticipated, and, thus, unpatentable, under 35 U.S.C. § 102 if a single prior art reference discloses each and every limitation of the claimed invention. *See Schering Corp. v. Geneva Pharm.*, 339 F.3d 1373, 1377 (Fed. Cir. 2003).

Claims 1–7, 10, and 11 are challenged as anticipated by Chelliah (Ex. 1004). Chelliah describes a computer architecture for on-line commerce that defines an electronic infrastructure to enable transactions analogous to those occurring in a physical structure, i.e., an Electronic Mall comprised of a collection of electronic stores, where each commercial transaction for goods and services from an electronic store is to a participant in the electronic commerce architecture, e.g., a customer. *See* Ex. 1004, col. 2, ll. 37–42, col. 3, ll. 7–11, col. 5, ll. 59–61, col. 6, ll. 5–12. Chelliah discloses an implementation in which a merchant’s Electronic Store uses various program objects, each of which is an integrated collection of data and functions that describe an entity or business function and the operations that can be performed on or by the entity or business function. *Id.* at col. 9, ll. 30–33. Such program objects can also access databases, serve as interfaces to non-object-oriented subsystems and may be in compliance with the Common Object Request Broker Architecture (“CORBA”). *Id.* at col. 9, ll. 33–38. Chelliah discloses that CORBA provides mechanisms by which objects may be distributed among various computers and transparently make requests and receive responses. CORBA provides for an Object Request Broker (“ORB”) that facilitates interoperability between applications on different computers and interconnects multiple object systems. *Id.* at col. 9, ll. 39–48. Thus, Chelliah’s Electronic Stores constitute application programs that users can select to provide the transactional capabilities of POSvc Applications in the ’492 Patent by connecting users to the

merchants, who can perform back-end processing, using object routing to achieve service network functionality.

Claim 1

Patent Owner contends that Chelliah does not teach or suggest the use of a “Web application” as claimed and properly construed. *See* PO Resp. 27–39. As previously discussed, Patent Owner’s construction of a Web application as a Web client in a Web browser is not supported by the ’492 Patent specification. Patent Owner argues that rather than a POSvc application, Chelliah teaches nothing more than the use of hyperlinks, *id.*, although Patent Owner does not indicate where Chelliah describes relying on hyperlinks. We find no discussion of hyperlinks in Chelliah.

At the same time, Patent Owner criticizes Chelliah as failing to commit to any particular front end and having goals unrelated to those of the ’492 Patent. PO Resp. 28. Patent Owner makes these assertions, notwithstanding the disclosure in the ’492 Patent that users may use personal computers and cellular devices to access merchants’ services via appropriate switching sites that may include non-Web computer sites and cellular provider sites. Ex. 1001, col. 5, l. 6–col. 6, l. 1. Thus, we are not persuaded by Patent Owner’s arguments that CORBA does not disclose the use of a Web server. PO Resp. 32–33. Patent Owner also ignores Chelliah’s disclosure of accessing the Electronic Mall through on-line services or the World Wide Web, such as through CompuServe. Ex. 1004, col. 10, ll. 11–25; col. 12, ll. 1–8. Thus, Chelliah discloses the Web server offering one-or-more Web applications as point-of-service applications in a point-or-service applications Web page, as recited in claim 1. Even if we were to agree with Patent Owner that a Web application in the ’492 Patent were limited to applications that are accessed

by a client, such as a Web browser, as discussed above, Chelliah discloses this feature.

Although Chelliah does not preclude the use of the Web, as Patent Owner points out, Chelliah discloses an approach that can be used in systems other than those on the Web, such as a cable set top box. PO Resp. 28. Thus, Chelliah contemplates its use in non-Web systems that may not have hyperlink technology available. As discussed above, to implement on-line transactions between a customer and merchant, Chelliah employs objects and CORBA technology to provide interoperability between applications on different computers in heterogeneous distributed environments and interconnect multiple object systems. Ex. 1004, col. 9, ll. 39-48. Using this technology, Chelliah discloses the claimed VAN switch, which we have construed to mean an OSI application layer switch that has a switching component, management and object routing component.

We are not persuaded by Patent Owner's argument that Chelliah never discloses how any of its back-end systems connect to the front end or that CORBA is limited to back-end processing. PO Resp. 25, 29, 32-33. We are also not persuaded by Patent Owner's contentions that Chelliah does not disclose a service network connecting through a Web server to a back-end transactional application. PO Resp. 31-34. Chelliah discloses the use of a CORBA ORB and provides examples in the CORBA Interface Definition Language ("IDL") of techniques for conducting user initiated transactions by routing information between the user at the front end interface (the Electronic Mall, from which the user can select an Electronic Storefront) and back-end processing. Ex. 1004, col. 28, ll. 29-41. Chelliah specifically discloses that a customer enters the Electronic Mall through user interface 13, e.g., a personal computer, where the customer is presented with a choice of Electronic Storefronts. *Id.* at col. 6, ll. 26-40.

In Chelliah, an Electronic Storefront performs the functions of POSvc in the '492 Patent because Chelliah discloses a computer program that can execute the type of transaction the user may be interested in performing. Thus, even if we were to include the “application service” disclosed in the '492 Patent as part of the VAN switch, as urged by Patent Owner, PO Resp. 3–4, Chelliah anticipates that service.

Chelliah also provides the switching, management and object routing disclosed in the '492 Patent. When the user selects an Electronic Storefront, Internal Commerce Subsystems 16 are invoked to interact with the customer, while External Commerce Subsystems 18 may be invoked to complete the transaction by accessing credit and shipping agencies *Id.* at col. 6, ll. 41–47. Chelliah discloses that the commerce subsystems may be considered “distributed objects,” *id.* at col. 7, ll. 7–16, arranged in any combination for a particular store as self-contained, independent modules connected to the architecture through a standard interface, *id.* at col. 8, ll. 18–22.

In particular, Chelliah discloses that a Participant Object, which describes a customer's payment method and a payment password, is created at the time a participant enrolls with an on-line service, such as CompuServe or America Online. *Id.* at col. 10, ll. 14–30. Chelliah contradicts patent Owner's contentions that CORBA is limited to back-end applications. PO Resp. 32. Chelliah discloses that the user interface and the Participant Program Object are configured in Customer Contact System 140, which may be an online service or a site on the World Wide Web. *Id.* at col. 12, ll. 1–8.

In Chelliah, when a customer enters an Electronic Storefront, Participant Program Object 112 is retrieved and activated and calls Sales Representative Factory 115, which is a program object that instantiates Sales Representative

Program Object 114. *Id.* at col. 13, ll. 23–35. Following instantiation, the Sales Representative Factory passes a pointer to the Participant Program Object, to establish communications between the Participant Program Object and the Sales Representative Program Object. *Id.* col. 14, ll. 19–26. The pointer may be a simple pointer or an object handle that can serve as an input to a CORBA–compliant ORB that can direct services of a particular program object to that object. *Id.* at col. 14, ll. 27–38. The Participant Program Object 112 communicates with a Customer Monitoring Object or a Sales Representative Program Object 114 created when the customer selects a store. *Id.* at col. 10, ll. 31–35. The Sales Representative Program Object is part of In-Store Processing System 142, e.g., a computer system that administers one or more Electronic Stores. *Id.* at col. 12, ll. 9–17. The Sales Representative Program Object, which is part of the Internal Commerce Subsystem 16, has access to the customer information and controls the transaction flow, interfacing with the customer, e.g., presenting the customer with product choices and receiving customer selections, and executing calls to pricing, fulfillment, and other subsystems. *See, generally, id.* at col. 12, l. 30–col. 23, l. 57.

In Chelliah, when a user accesses the Electronic Mall and selects an Electronic Storefront using a Web based service, such as accessing a Web page through CompuServe or a Customer Contact site on the World Wide Web, the user selects and causes the activation of a POSvc Web application, which we have construed to mean a computer program to perform a certain type of work using the web, i.e., executing the type of transaction the user may be interested in performing.

Chelliah's application programs, i.e., Electronic Stores, run as a service network, i.e., a network on which services such as customer transactions, as

distinguished from underlying network communication services are provided. This service network offers services on top of a facilities network, such as the Internet or a cable system, to provide a conduit or channel through which the customers and merchants can conduct transactions in real-time, with the merchant accessing back-end internal and external databases using objects and communicating with the customer accessing the system through a web server, such as that provided by CompuServe or a Customer Contact site, using objects, such as the Sales Representative Program Object. Thus, having reviewed all of Petitioner's assertions for (Pet. 23-28; Pet. Reply 5-8), and Patent Owner's arguments against (PO Resp. 21-39), and the evidence cited therein, we are persuaded that Chelliah discloses all of the elements of claim 1 and we conclude that Chelliah anticipates claim 1.

Claim 2 recites that the VAN switch is an application layer switch in the application layer of the OSI model. For the reasons discussed above, we conclude that the Electronic Stores in Chelliah are application programs in the application layer of the OSI model.

Patent Owner contends that claims 3, 5, 6, 7, 8, 10, and 12 are not anticipated by Chelliah because Chelliah does not disclose a Web application. PO Resp. 31.¹¹ As discussed above, we have already determined that Chelliah discloses the claimed Web application.

Claim 3 recites that the VAN switch enables switching to Web merchant services in response to a Web server receiving a selection of a POSvc application. As discussed above, Chelliah's disclosure of connecting the customer to the Web

¹¹ Claims 8 and 12 and are not challenged as anticipated by Chelliah. In another section of this decision we address Petitioner's challenges to claims 8 and 12, as obvious over the combination of Chelliah with other references (claim 8, Chelliah and Electronic Banking; claim 12 Chelliah and Valentino).

merchant when the customer selects an Electronic Store, anticipates the limitation of claim 3.

Claim 4 recites that the Web merchant services includes one of more Web applications offered as a VAN service, utilizing the VAN switch. Claim 5 recites that each Web application is a VAN service or online service atop the Web utilizing the VAN switch. Patent Owner contends that Chelliah does not disclose a VAN service as recited in claims 4 and 5. PO Resp. 31–39. As previously discussed, the VAN service and the application service in the '492 Patent are not well distinguished. However, also as previously discussed, to the extent that these services concern routing communications in the VAN switch, whether or not as a feature of a POSvc application, Chelliah anticipates these limitations. Thus, we conclude that Chelliah anticipates claims 4 and 5.

Claim 6 recites that the service network includes the Web applications and manages the flow of real-time Web transactions from the Web applications and includes the VAN switch. As discussed above, Chelliah discloses a service network in the form of Electronic Stores, i.e. POSvc applications or Web applications, that use objects to perform the transaction and control operations using, for example, the Sales Representative Program Object. Thus, we conclude that Chelliah anticipates claim 6.

Claim 7 recites that the Web server is configured to receive a Web transaction request to perform one of the real-time Web transactions from one or more Web applications, utilizing the VAN switch. As discussed above, Chelliah discloses that a Customer Contact site can receive such a request. Thus, we conclude that claim 7 is anticipated by Chelliah.

Claim 10 is an independent method claim that recites offering a plurality of Web applications corresponding to respective merchants' back-end transactional

applications, receiving a request for services upon receipt of a Web application selection to connect to the selected back-end transactional application, which is an on-line service provided by the Web merchants of the back-end, utilizing the VAN switch to switch to the back-end transactional application, providing distributed control of a service network operating within the boundaries of an IP based facilities network, connecting to specified Web merchant services or to back-end services, wherein the connection is managed, accessing the host or data repository coupled to the back office server and completing the real time transaction.

Patent Owner does not discuss claim 10, except to argue that Chelliah does not disclose a Web application. PO Resp. 31 *et seq.* We have already addressed Patent Owner's arguments on this point. As discussed above, Chelliah discloses an online service or a Customer Contact site receiving such a request from a user of an Electronic Mall and handing it off to an Electronic Store, which provides POSvc and the VAN switch functionality using objects. Chelliah discloses Internal and External Commerce Subsystems that are accessed using various program objects to check back-end databases of available products, offer products to a customer, receive customer responses, determine pricing, check customer credit information, process payments and arrange shipping and delivery. *See generally*, Ex. 1004, col. 1-20. As previously discussed, Chelliah's Sales Representative Program Objects guides the customer through the processing. Thus, we conclude that claim 10 is anticipated by Chelliah.

Claim 11 recites that the real-time Web transactions of claim 10 are Web transactions from the Web application accessing a value added network service. As discussed above, Chelliah discloses both these features. Thus, we conclude that claim 11 is anticipated by Chelliah.

OBVIOUSNESS OF CLAIMS 8 AND 12

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 the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *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 skill in the art; and (4) where in evidence, so-called secondary considerations including commercial success, long-felt but unsolved needs, failure of others, and unexpected results. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966) (“the Graham factors”). The level of ordinary skill in the art usually is evidenced by the references themselves. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995); *In re Oelrich*, 579 F.2d 86, 91 (CCPA 1978).

For an obviousness analysis, prior art references are “considered together with the knowledge of one of ordinary skill in the pertinent art.” *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994) (quoting *In re Samour*, 571 F.2d 559, 562 (CCPA 1978)). Moreover, “it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.” *In re Preda*, 401 F.2d 825, 826 (CCPA 1968). That is because an obviousness analysis “need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR*, 550 U.S. at 418; *see also In re Translogic Tech., Inc.*, 504 F.3d at 1259.

Claim 8 is challenged as obvious over the combination of Chelliah and Electronic Banking. Claim 12 is challenged over the combination of Chelliah and Valentino. Patent Owner argues that Chelliah does not disclose a POSvc application displayed on a Web page and that neither Electronic Banking nor Valentino provides this disclosure. PO Resp. 39–40. We have already declined to adopt Patent Owner’s position.

Claim 8 depends from claim 1 and recites that the system further comprises a computer including a data depository including banking data executing a back–end transactional application to retrieve banking data to complete a real-time banking transaction from a banking Web application. Among the five major elements of the video home banking system described in Electronic Banking are communications and databases. Ex. 1006, 124–5. Electronic Banking discloses that such databases may be located at the operating center or resident with an information provider and that a Gateway mechanism may be employed to link similar databases, such as those at banks, with the operation center. *Id.* at 125. The use of such databases in financial transactions is well known, as evidenced by the references to legacy databases in the ’492 Patent. Ex. 1001, col. 7, ll. 1–5. The description of the services provided by the network in Electronic Banking of allowing the user to select a service, such as news or banking, followed by the bank’s capturing the transaction and processing it, is motivation for the combination with Chelliah. *See* Ex. 1006, 129.

In consideration of the above, we conclude that claim 8 is unpatentable over the combination of Chelliah and Electronic Banking.

Independent claim 12 recites a computer implemented system operated by a business entity. The claimed system has a Web application portal with one or more Web applications offered by merchants to provide VAN services atop the

Web for access by employees. The business entity operating the portal provides a Web page that lists employee Web applications that the portal allows to be accessed as on-line services over a service network acting as a VAN switch running on top of a facilities network selected from the Web, the Internet or e-mail networks. Claim 12 also recites back-end applications corresponding to the POSvc applications accessed to complete real-time transactions. Except for its application to employee accessible systems, the elements of claim 12 are disclosed by the Electronic Storefronts of Chelliah, as discussed above. We do not repeat the analysis of Chelliah. Valentino discloses a system for enabling an employee to access information concerning up-to-date savings plan, withdrawals, benefits, and other information. Ex. 1007, Abstract. Patent Owner does not dispute that substituting the Electronic Storefronts of Chelliah with the employee accessible system of Valentino is within the capability of one of ordinary skill in the art. Thus, we conclude that Claim 12 is obvious over the combination of Chelliah and Valentino.

MOTION TO AMEND

Patent Owner moves to amend claim 4. Mot. to Amend 3-6. Patent Owner's Motion to Amend claim 4 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 4 as Substitute Claim 13.

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 5,778,178 (the '178 Patent), which issued on July 7, 1998, and provisional application 60/006,634 (“the Provisional Application”) filed on Nov. 13, 1995. Mot. to Amend 5.

Patent Owner does not map the new claim limitations in Substitute Claim 13 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. *Id.* Patent Owner also incorporates into Substitute Claim 13 language that is not in the '492 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).

Substitute Claim 13 recites the added limitation that “each Web application and each of the respective point-of-service applications is a transactional application that is a Web client in a Web browser.” Mot. to Amend 3. Patent Owner proposed that we construe the term Web application using this same language, i.e., that a Web application is a Web client in a Web browser. We addressed this proposed language at length in our construction of Web application in this decision and concluded that it is not supported by the written description of the ’492 Patent. Patent Owner has not identified any further written description support in the ’178 Patent or the Provisional Application for the proposed language. 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. 48,756, 48,787 (Aug. 14, 2012). Therefore, we deny Patent Owner’s Motion to Amend as failing to explain how the proposed substitute claim complies 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 54 (“Mot. to Exclude”). Specifically, Petitioner argues that we should exclude Exhibits 2120 (a webpage printout from webopedia.com), 2123 and 2124 (w3c Tenth Anniversary time line), and 2126 (a printout from Dr. Dobbs Journal on CD ROM) 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 authenticated sufficiently. Paper 57 (“Opp. to Mot. to Exclude”) 1–4. 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 59 ("Pet. Reply") 1–3.

Under 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 Ins. 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 this 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; Paper 40. Petitioner disputes that these indicia sufficiently authenticate the documents. Paper 59. The declarant inventor, however, 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, we 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. Paper 57 at 4. Patent Owner cites *Neev v. Abbott Med. Optics, Inc.*, CIV. 09-146 RBK, 2012 WL 1066797 (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. Paper 57 at 5. The panel can assess the proper weight to be given these exhibits. However, we have not cited Exhibits 2120, 2123, 2124, and 2126 in our Final Written Decision.

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 not covered by a hearsay exception, such as the business records exception, or are documents prepared in the course of litigation. Mot. to Exclude 4–9. 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.

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* FRE 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. 2006 ¶ 7. The declarant inventor was subject to cross examination on the Inventor's Declaration and the exhibits. 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. FRE 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.

In consideration of the above, 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 1–8 and 10–12 are unpatentable;

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

FURTHER ORDERED, that Petitioner's Motion to Exclude 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.

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