

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

METACLUSTERLT, UAB,
Petitioner,

v.

BRIGHT DATA LTD.,
Patent Owner.

PGR2022-00052
Patent 11,272,034 B2

Before THOMAS L. GIANNETTI, SHEILA F. McSHANE, and
RUSSELL E. CASS, *Administrative Patent Judge*.

McSHANE, *Administrative Patent Judge*.

DECISION
Granting Institution of Post-Grant Review
35 U.S.C. § 324

I. INTRODUCTION

Metacluster LT, UAB (“Petitioner”)¹ filed a Petition requesting a post-grant review of claims 1–27 (the “challenged claims”) of U.S. Patent No. 11,272,034 B2 (Ex. 1001, the “’034 patent”). Paper 1, 1 (“Pet.” or “Petition”). Bright Data Ltd. (“Patent Owner”) filed a Preliminary Response. Paper 6 (“Prelim. Resp.”).

We may not institute a post-grant review “unless . . . the information presented in the petition filed under section 321, if such information is not rebutted, would demonstrate that it is more likely than not that at least 1 of the claims challenged in the petition is unpatentable.” 35 U.S.C. § 324(a). Upon consideration of the arguments and evidence, we determine Petitioner has demonstrated that it is more likely than not that at least one of the challenged claims is unpatentable. Accordingly, we institute a post-grant review of the challenged claims of the ’034 patent.

A. *Related Matters*

The parties state that there are no pending litigations involving the ’034 patent. Pet. 3; Paper 4, 1. The parties identify several litigations, post grant reviews, and reexaminations for other patents that are related to the ’034 patent. Pet. 2–8; Paper 4, 1–3.

B. *The ’034 Patent*

The ’034 patent is titled “System And Method For Improving Internet Communication By Using Intermediate Nodes” and issued on March 8, 2022, from an application filed on April 27, 2021. Ex. 1001, codes (22), (45), (54). The patent is subject to a terminal disclaimer. *Id.* at code (*).

¹ Metacluster LT, UAB identifies Code200, UAB, Teso LT, UAB, Oxysales, UAB, and Coretech LT, UAB as other real parties-in-interest. Pet. 2.

The patent is a continuation of Application No. 16/524,026 (now U.S. Patent No. 11,012,530); Application No. 16/214,451 (now U.S. Patent No. 10,440,146); Application No. 15/663,762 (now U.S. Patent No. 10,277,711); and Application No. 14/930,894 (now U.S. Patent No. 9,742,866); as well as a divisional of Application No. 14/468,836 (now U.S. Pat. No. 9,241,044); and which claims priority to U.S. Provisional Application No. 61/870,815. *Id.* at code (60).

The '034 patent is directed to a method for fetching content from a web server to a client device using tunnel devices serving as intermediate devices. Ex. 1001, code (57). The client device accesses an acceleration server to receive a list of available tunnel devices. *Id.* Requested content may be partitioned into slices, with the client device sending a request for the slices to the available tunnel devices. *Id.* The tunnel devices may, in turn, fetch slices from the data server and send the slices to the client device, where the content is reconstructed from the received slices. *Id.*

A client device may also serve as a tunnel device, which serves as an intermediate device to other client devices. Ex. 1001, code (57). The selection of tunnel devices to be used by a client device may be made in the acceleration server, in the client device, or in both. *Id.* Partitions into slices may be overlapping or non-overlapping, and the same slice, or the whole content, may be fetched via multiple tunnel devices. *Id.*

C. Challenged Claims

Petitioner challenges the patentability of claims 1–27 of the '034 patent. Pet. 1. Claim 1 is the only independent claim. Claim 1 is illustrative, and reproduced below, with identifiers included in brackets.²

² The identifiers are the same as those used in the Petition. See Pet. 36–56.

1. [1.p] A method for use with a first content identified by a first content identifier and stored in a first web server, for use with a second content identified by a second content identifier and stored in a second web server, and for use with a third server, the method comprising:

1[a] sending, by a first client device to the third server, the first content identifier;

1[b] receiving, by a second client device from the third server, the first content identifier;

1[c] sending, by the second client device to the first web server, the first content identifier;

1[d] receiving, by the second client device from the first web server, the first content;

1[e] sending, by the second client device to the third server, the first content;

1[f] receiving, by the first client device from the third server, the first content;

1[g] sending, by the first client device to the third server, the second content identifier;

1[h] receiving, by the second client device from the third server, the second content identifier;

1[i] sending, by the second client device to the second web server, the second content identifier;

1[j] receiving, by the second client device from the second web server, the second content;

1[k] sending, by the second client device to the third server the second content; and

1[l] receiving, by the first client device from the third server the second content,

1[m] wherein the second client device is a portable device that stores, operates, or uses, a mobile operating system.

Ex. 1001, 172:43–173:6; Ex. 1007, 1 (Certificate of Correction).

D. Asserted Grounds of Unpatentability

Petitioner asserts that the challenged claims would have been unpatentable on the following grounds (Pet. 12):

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1–27	103 ³	Mithyantha ⁴
19	103	Mithyantha, RFC 2616 ⁵
1–27	101	patent-ineligible subject matter

In addition to other evidence, Petitioner relies on declaration testimony of Dr. James Olivier (Ex. 1002) in support of these grounds.

The following subsections provide a brief description of the asserted prior art references.

1. Mithyantha (Ex. 1009)

Mithyantha is directed to “systems and methods for using equal cost multi-path routing for traffic distribution in a cluster environment.” Ex. 1009, 1:7–10. Mithyantha provides for accelerating network traffic between “one or more clients 102a-102n” that communicate with “one or more servers 106a-106n” via appliance 200. *Id.* at 4:58–65, 31:50–106. Mithyantha discloses that appliance 205 may provide caching in memory and/or storage to accelerate delivery of applications and data. *Id.* at 8:10–12. Figure 1B, reproduced below, is a block diagram of an environment for delivering a computing environment from a server to a client via an appliance. *Id.* at 3:43–47.

³ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 287–88 (2011), which amended 35 U.S.C. § 103, was effective on March 16, 2013 and applies here.

⁴ U. S. Patent No. 8,972,602 B2, issued March 3, 2015, application date June 15, 2013 (Ex. 1009).

⁵ Hypertext Transfer Protocol—HTTP/1.1, Network Working Group, RFC 2616, The Internet Society, 1999 (Ex. 1005).

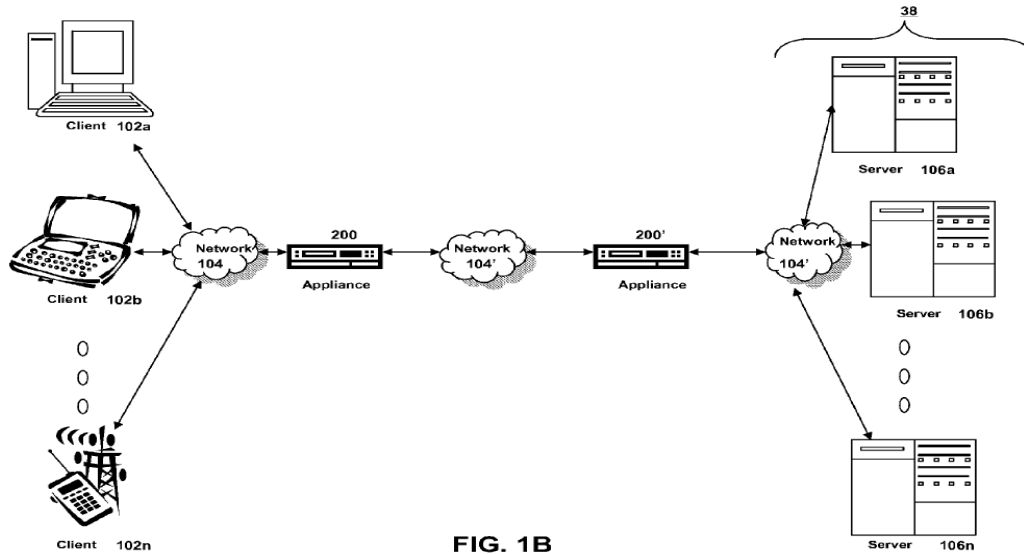


FIG. 1B

Figure 1B, above, shows a network environment that has one or more clients 102a–102n in communication with one or more servers 106a–106n via a first and second appliance 200. Ex. 1009, 7:1:18. Appliances 200 can “act[] as a proxy or access server to provide access to the one or more servers 106.” *Id.* at 9:15–21. Mithyantha further describes appliance 200 as an “interface unit” or “gateway,” that can facilitate SSL VPN connections. *Id.* at 5:31–33, 5:54–59, 9:53–55.

Mithyantha’s clients, appliances, and servers communicate over networks, which can be Internet/World Wide Web networks, using “any TCP/IP based protocol.” Ex. 1009, 5:3–7. Clients 102 may send an HTTP requests for a web page to any one of servers 106, which are described as web servers. *Id.* at 6:25–26, 6:52–56, 11:13–17, 11:50–52.

2. RFC 2616 (Ex. 1005)

RFC 2616 is version 1.1 of “Hypertext Transfer Protocol—HTTP/1.1,” which defines the HTTP protocol for Internet communications. Ex. 1005, 1, 7. RFC 2616 explains that the HTTP protocol is a request/response protocol. *Id.* at 10.

II. ANALYSIS OF THE OBVIOUSNESS GROUNDS

A. *PGR Eligibility*

As a threshold issue, we must determine if the '034 patent is eligible for post-grant review. The post-grant review provisions of the America Invents Act (AIA) apply to a patent that contains a claim with an effective filing date on or after March 16, 2013. *See* AIA, Pub. L. No. 112-29, 125 Stat. 284 (2011), §§ 3(n)(1), 6(f)(2)(A). The statute defines the “effective filing date” as:

(A) if subparagraph (B) does not apply, the actual filing date of the patent or the application for the patent containing a claim to the invention; or

(B) the filing date of the earliest application for which the patent is entitled, as to such invention, to a right of priority under section 119, 365(a), 365(b), 386(a), or 386(b) or to the benefit of an earlier filing date under section 120, 121, 365(c), or 386(c).

35 U.S.C. § 100(i)(1).

Determining whether a patent is subject to the first-inventor-to-file provisions of the AIA, and therefore eligible for post-grant review, is straightforward when the patentee filed the application from which the patent issued on or after March 16, 2013, without any priority claim to an application filed prior to March 16, 2013. The application that matured into the '034 patent is such an application. The earliest priority claim for the '034 patent is an application filed August 28, 2013. Ex. 1001, code (60). Accordingly, the effective filing date of the '034 patent is no earlier than August 28, 2013, making it eligible for post-grant review.

Additionally, “[a] petition for a post-grant review may only be filed not later than the date that is 9 months after the date of the grant of the patent.” 35 U.S.C. § 321(c). The '034 patent issued March 8, 2022, and the

Petition was accorded a filing date of July 21, 2021, just over 4 months after the grant of the '034 patent. Ex. 1001, code (45); Paper 5, 1. Accordingly, Petitioner timely filed the Petition.

B. Level of Ordinary Skill in the Art

Petitioner contends a person of ordinary skill in the art “would have had at least a bachelor’s degree in Computer Science or related field (or equivalent experience), and at least two years’ experience working with and programming networked computer systems.” Pet. 13 (referencing Ex. 1002 ¶ 33).

Patent Owner does not propose a level of ordinary skill in the art. *See generally* Prelim. Resp.

For the purposes of this Decision, we adopt Petitioner’s proposed level of ordinary skill in the art, with the exclusion of “at least” because it introduces ambiguity. We determine that Petitioner’s definition is consistent with the prior art of record and the skill reflected in the Specification of the '034 patent based on our review of the record.

C. Claim Construction

In post-grant reviews, we interpret a claim “using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b).” 37 C.F.R. § 42.200(b). Under this standard, we construe the claim “in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” *Id.*

Petitioner asserts that the district court’s constructions in *Luminati Networks Ltd. v. UAB Tesonet, et al.*, No. 2:18-cv-229 (E.D. Tex.) (“Tesonet litigation”) are appropriate to consider in this case. Pet. 25. Petitioner also refers to orders issued in *Bright Data Ltd. v. Teso LT, et. al.*, No. 2:19-cv-

395 (E.D. Tex.) (“Teso litigation”). *Id.* at 23–27. In particular, Petitioner refers to four claim construction orders — the claim construction order in the Tesonet litigation (Ex. 1018, “Tesonet order”), the claim construction order issued in the Teso litigation (Ex. 1010, “Teso order”), an additional order related to the term “server” in the Teso litigation (Ex. 1012, “additional Teso order”), and a supplemental claim construction order in the Teso litigation (Ex. 1013, “supplemental Teso order”). *Id.* at 23–27.

In the Tesonet litigation, the district court construed some of the claim terms of U.S. Patent Nos. 9,241,044 and 9,742,866 (“the ’866 patent”), which are in the priority chain of the ’034 patent. Ex. 1018, 1; Ex. 1001, code (60). More specifically, the ’034 patent is in a line of continuations from the ’866 patent. Ex. 1001, code (60). As Petitioner asserts, the ’034 patent shares the same Specification with that of the ’866 patent, as well as that of U.S. Patent No. 10,469,614 (“the ’614 patent”), which was at issue in the Teso order as well as the supplemental Teso order. *See* Pet. 2–3, 23–27.

The district court construed the preamble of claim 1 of the related patents to be limiting. *See* Ex. 1010, 9; Ex. 1018, 15, 58. The district court also construed “client device” as “a device that is operating in the role of a client by requesting services, functionalities, or resources from other devices” in the Tesonet litigation, and similarly construed the term in the Teso litigation. Ex. 1018, 51; Ex. 1010, 15. Related to the term “server,” the district court construed the term “first server” as “a server that is not the client device” in the Teso litigation. Ex. 1010, 13–14, 24. In the supplemental Teso order, the district court clarified the construction, stating “a component can be *configured* to operate in different roles—so long as it does not ‘simultaneously serve as more than one of: the client device, the first server/second server, and the web server.’” Ex. 1013, 10.

Patent Owner disagrees with the district court's constructions. Prelim. Resp. 6. Patent Owner argues that role-based constructions are not appropriate for an intermediary device because "an intermediary operates in the role of a client at some points in time and the same intermediary operates in the role of a server at other points in time." *Id.* at 9. Patent Owner also asserts that "petitioner's purely role-based constructions are not appropriate to the extent that petitioner argues a device need not operate 'exclusively' in either a client role or a server role" because if there is no requirement for exclusivity, "there is nothing to distinguish a 'client device' and a 'server.'" *Id.*

Patent Owner asserts that the "first server" is a server "regardless of the role that is being performed at a particular point in time." Prelim. Resp. 8. Patent Owner refers to the prosecution history of the '614 patent (*id.* (citing Ex. 2005, 17)), as well the prosecutions of other patents in the patent family (*id.* at 16–18), where the applicant distinguished a server device from a client device. Patent Owner contends that Petitioner is trying to modify the district court's construction of "server" by removing the requirement that it "is a *server* regardless of the role that is being performed at a particular point in time." *Id.* at 8 (citing Pet. 24).

The district court considered the issue of whether a client device, for instance, should be construed in a role-based or structural manner, and the evaluation included whether a device could sometimes be operated as a client and at other times could operate as something else. Ex. 1018, 48–51. In support, the district pointed the patent disclosure that:

Any network element in the system may be a dedicated device that assumes only a single *role*, and thus being only a client (using tunnels), a tunnel, a client (using agents/ peers), an agent, or a peer device. Alternatively or in addition, *a network element*

may be capable of assuming two or more *roles*, either at different times or simultaneously, from the *list of roles including a client* (using tunnels), a tunnel, a client (using agents/peers), an agent, or a peer device. Alternatively or in addition, a device may be capable of assuming all of the above roles.

Ex. 1018, 50 (quoting '866 patent at 125:33–42, with identical disclosure in '034 patent (Ex. 1001, 125:24–33)).

Referring to Figure 5b, which shows interactions between “Acceleration Server,” “Client Device,” “Tunnel Device,” and “Data Server,” the district court declined to limit the term “client device” to a “tunnel, agent, or peer devices serving as intermediate devices to fetch content in the method” because the illustration did not warrant limiting the term. Ex. 1018, 51. Instead, the district court construed the term “client device” in accordance with its function. *Id.*

The district court also considered issues including whether a “server must be a distinct device from the client device and the web server” and whether “the second server and webserver can be the same device.” Ex. 1010, 13–14, 24. The district court determined that “[n]othing in the intrinsic record suggests one device cannot perform both the role of a web server and a second server.”⁶ *Id.* at 14, 24.

At this juncture, and in view of the disclosures of the Specification, we agree with and adopt the district court’s claim construction for these

⁶ The district court acknowledges, and we agree, that if the claim requires components that are different, such as a “client device establishes a TCP connection with the second server,” then the respective client device and server cannot be the same device. See Ex. 1010, 14. The district court, however, goes on to indicate that, absent claim language requiring separate components, care should be taken not to import limitations into device constructions. *Id.*

terms. As disclosed in the section reproduced above on the respective roles of network elements (*see* Ex. 1001, 125:24–33), the Specification confirms the role-based nature of network elements, which includes client devices and servers, and also confirms that a network elements may perform two or more roles. *See* Ex. 1001, 125:24–33. And the Specification also discloses that different roles may be assumed by network elements, either at different times or simultaneously. *Id.*

Additionally, contrary to Patent Owner’s arguments, we do not find that, at this juncture, statements made during the prosecution of the ’614 patent and related cases disclaim the scope of claim terms.

We only construe terms that are necessary to resolve disputes. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017); *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (“[O]nly those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy.”). At this stage, no other terms require explicit construction.

D. Applicable Law

A patent claim is unpatentable under 35 U.S.C. § 103 if “the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective date of the claimed invention to a person having ordinary skill in the art to which said subject matter pertains.” 35 U.S.C. § 103 (2011); *see also KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary

skill in the art; and (4) objective indicia of nonobviousness⁷. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

E. Obviousness of Claims 1–27 Over Mithyantha, and Claim 19 with RFC 2616

Petitioner contends that claims 1–27 are unpatentable over Mithyantha. Pet. 36–85. Patent Owner asserts that Mithyantha does not teach some claim limitations. Prelim. Resp. 18–22.

1. Independent claim 1

a) Preamble [1.p]

Petitioner contends that Mithyantha discloses:

a method for use with a first web page (the claimed “first content”) identified by a first URL within an HTTP web request (the claimed “first content identifier”) that is stored in a first server 106a (the claimed “first web server”) and a second web page (the claimed “second content”) identified by a second URL within an HTTP web request (the claimed “second content identifier”) that is stored in a second server 106b (the claimed “second web server”), and for use with appliance 200/200a (the claimed “third server”).

Pet. 37. Petitioner asserts that Mithyantha discloses that servers 106a-n are web servers when servicing an HTTP web request from a client 102. *Id.* (citing Ex. 1002 ¶ 84; Ex. 1009, 6:25–26). Petitioner argues that “Mithyantha further discloses that client 102, as an ‘HTTP client,’ may use a ‘web browser’ to communicate HTTP web requests that contain URLs over network 104. *Id.* at 38 (citing Ex. 1009, 10:45–51, 10:60–62, 11:50–52, 12:17–19; EX1002 ¶ 87). Petitioner contends that Mithyantha discloses that a client 102 transmits requests to servers 106a-106n. *Id.* (citing Ex. 1009,

⁷ No evidence of objective indicia of nonobviousness is presented by the parties. *See generally* Pet.; Prelim. Resp.

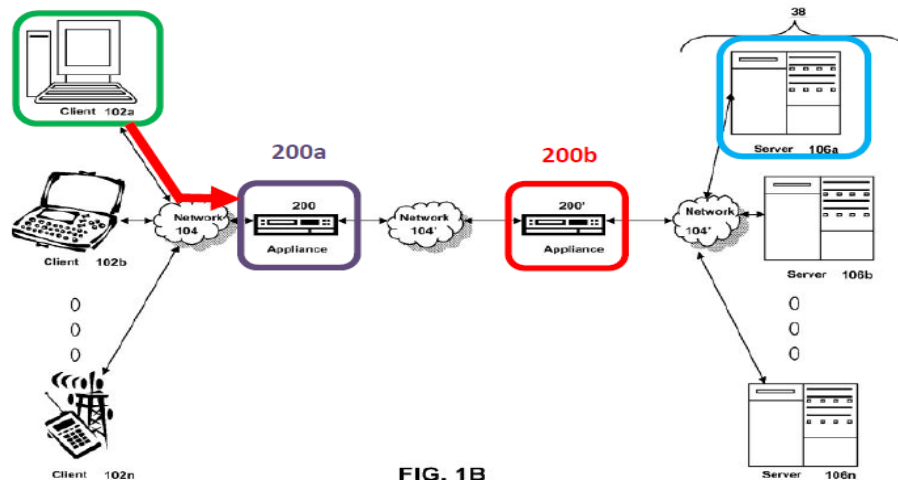
6:52–56; Ex. 1002 ¶ 92). Petitioner asserts that an HTTP web request may be sent over network 104 via a router that directs the request to a first appliance (e.g. appliance 200/200a) acting as “a proxy or access server” and then to a second appliance (e.g. appliance 200’/200b). *Id.* at 39 (citing Ex. 1009, 4:64–65, 5:3–7, 7:1–18, 9:15–17, 53:5–13, 53:21–28, 54:17–24, 56:7–23, Figs. 1B, 6; Ex. 1002 ¶ 90). Petitioner argues that the second appliance (e.g. appliance 200’/200b) then transmits the HTTP request to a server 106 (e.g. server 106a), operating as a web server that stores web page content. *Id.* (citing Ex. 1009, 6:25–30, 6:52–53, 7:1–18, 9:53–55, 11:13–18, 23:55–58, 24:12–14, 54:17–24, Figs. 1B, 6; Ex. 1002 ¶ 91).

Patent Owner argues that Mithyantha does not teach the preamble because the element asserted to be the “third server” [appliance 200/200a] “sometimes operates in the role of a client by sending requests/receiving responses and sometimes operates in the role of a server by receiving requests/sending responses,” which is impermissible under role-based claim construction. Prelim. Resp. 12. We are not persuaded by this argument because, as discussed *supra* Section II.C, the ’034 patent discloses that different roles may be assumed by network elements, either at different times or simultaneously.

At this juncture, we determine that Petitioner has provided sufficient evidence that Mithyantha teaches the preamble of claim 1.

b) Limitation 1[a]

Petitioner presents annotated Figure 1B of Mithyantha, reproduced below. Pet. 40.



According to Petitioner, annotated Figure 1B, above, depicts that “[green] first client 102a (the claimed ‘first client device’) sends to [purple] first appliance 200/200a (the claimed ‘third server []’) an HTTP web request, which contains a URL (the claimed ‘first content identifier’).” Pet. 40 (citing Ex. 1002 ¶ 94). Petitioner argues that client 102a meets the construction of a “client device,” and appliance 200/200a is a “third server” because “it is a device that operates in the role of a server by offering information resources, services, and/or applications and that is not the client device.” *Id.* at 41–42. Petitioner refers to Mithyantha’s disclosure that appliance 200/200a accepts connections from client 102a to service HTTP requests and sends back responses: the content from the web server. *Id.* at 42 (citing Ex. 1009, 9:8–17, 23:58–64; Ex. 1002 ¶ 98). Petitioner asserts that if a “server” were required to have the physical properties of a server, as Patent Owner contends, appliance 200a is also a server under that requirement because “it ‘may be deployed as and/or executed on any type and form of computing device,’ including a ‘server’ that is ‘capable of communication and that has sufficient processor power and memory

capacity to perform the operations described herein.” *Id.* at 42–43 (citing Ex. 1009, 13:65–14:2, 16:58–64; Figs. 1E, 1F; Ex. 1002 ¶ 99).

Patent Owner does not present any arguments specific to limitation 1[a]. Patent Owner does, however, present arguments directed to Petitioner’s assertions as to first appliance 200/200a in conjunction with the assertions made for limitation 1[b]. We address these arguments in the discussion of limitation 1[b], and, as discussed below, we do not find the arguments persuasive. At this juncture, we determine that Petitioner has provided sufficient evidence that Mithyantha teaches limitation 1[a].

c) Limitation 1[b]

Petitioner refers to annotated Figure 1B of Mithyantha, reproduced above, and asserts that “[red] appliance 200’/200b (the claimed ‘second client device’) receives from [purple] appliance 200/200a (the claimed ‘third server’) an HTTP web request, which includes a URL (the claimed ‘first content identifier.’)” Pet. 43–44 (citing Ex. 1002 ¶ 101). Petitioner argues that appliance 200’/200b is a “client device” because it establishes a connection with server 106 to request services, functionalities, or resources from the server. *Id.* at 44–45 (citing Ex. 1002 ¶ 102; Ex. 1009, 54:17–23 (“second appliance 200b communicates with a server via network 104”); 54:20–23 (describing communications “from second appliance to server, and vice versa”)). Dr. Olivier provides supporting testimony that appliance 200’/200b serves in this role, with appliance 200’/200b “transmit[ting] the HTTP web request over network 104’ to a server 106 (e.g., server 106a), which may operate as a web server that stores web page content.” Ex. 1002 ¶ 91 (citing Ex. 1009, 6:25–30, 6:52–53, 7:1–18, 9:53–55, 11:13–18, 23:55–58, 24:12–14, 54:17–24, Figs. 1B, 6).

Patent Owner contends that for limitation 1[b], “when appliance 200’ receives an HTTP request from appliance 200, appliance 200’ is operating in the role of a server under the purely role-based constructions,” so appliance 200’ is not operating in the role of a client, and “when appliance 200 sends an HTTP request to appliance 200’, appliance 200 is operating in the role of a client,” so appliance 200 is not operating in the role of a server. Prelim. Resp. 13–14. Patent Owner repeats similar arguments for limitations 1[e], 1[h], and 1[k] of claim 1. *Id.* at 14–16.

Patent Owner also argues that Mithyantha does not teach a “second client device” because a person of ordinary skill in the art would understand that appliance 200 is a server and not a client device. Prelim. Resp. 18. Patent Owner contends that a person of skill in the art would understand that appliance 200 is a corporate server. *Id.* at 19 (citing Ex. 1009, 5:49–54). Patent Owner asserts that appliance 200 “is a dedicated network element, unlike a client device.” *Id.*

Patent Owner additionally argues that Mithyantha does not teach the first client device ↔ third server ↔ second client device ↔ first/second web server architecture of the ’034 patent. Prelim. Resp. 20. Patent Owner contends that Petitioner identifies “appliance 200 as a server and an identical appliance 200’ as a client device,” which is contrary to its representations in the Teso litigation that it would not treat client devices and servers as interchangeable general use computers. *Id.* (citing Ex. 1010, 15; Ex. 1023, 11). Patent Owner asserts that “Petitioner does not explain differences between appliance 200 and appliance 200’ other than the role being performed at a particular point in time.” *Id.* Patent Owner contends that Petitioner does not provide motivation to modify appliances 200, 200’ to be “client devices,” while keeping appliance 200 as a server, or to arrive at the

specific architecture of the '034 patent. *Id.* at 20–21. Patent Owner argues that Mithyantha's disclosure that "computing device 100" includes client 102, server 106, and appliances 200, 200' shows that Mithyantha does not distinguish between client devices and servers. *Id.* at 21 (citing Ex. 1009, 13:65–14:2). Patent Owner also asserts that because the components of Mithyantha are on a corporate network, Mithyantha does not teach hiding the identity of client 102 from server 106, and therefore does not solve the problems of traceability and anonymity addressed in the '034 patent. *Id.*

At this stage of the proceedings, we do not agree that Mithyantha's second appliance 200'/200b cannot be considered the claimed "second client device" and its first appliance 200/200a cannot be considered the claimed "third server." As discussed *supra* Section II.C, we have adopted the district court's constructions of claim terms. More specifically, the district court determined, and we concur based on the present record, that "client device" is "a device that is operating in the role of a client by requesting services, functionalities, or resources from other devices" and a "first server" functions as "a server that is not the client device." On this record, Petitioner has demonstrated that Mithyantha's second appliance 200'/200b functions as the claimed "second client device," as it operates as a client by requesting services, functionalities, or resources from other devices, that is, it transmits HTTP web requests over the network to a server. *See* Pet. 44–45. Mithyantha also discloses that its first appliance 200/200a functions in a server role, with appliance 200/200a sending back responses to client 102a, that is, content from the web server, and it is a separate element from a client device. *See id.* at 41–42. Moreover, as discussed above, Petitioner's assertions are consistent with the role-based nature of the elements as disclosed in the '034 patent. Further, we do not find that Petitioner's

applications of the claim elements to Mithyantha are arbitrary because they are consistent with the district court’s claim construction of the respective claimed elements and the elements’ functions and roles, as discussed.

Moreover, Mithyantha discloses that its appliances can provide different functions (see e.g. Ex. 1009, 5:31–33, 8:65–67, 9:8–21, 9:53–55; 23:58–64), and may be implemented in many forms. That is, the implementation of appliance 200 is generally described as being on any form of computing device such as “computing device 100,” and “computing device 100 can be any workstation, desktop computer, laptop or notebook computer, server, handheld computer, mobile telephone.” See *id.* at 13:65–142, 16:58–64.

We do not agree with Patent Owner’s allegations regarding a required architecture. Patent Owner does not explain how these requirements are recited in the limitations of claims. Instead, at this juncture, it appears that the arguments are an attempt to impermissibly introduce limitations into the claim that are not recited. Similarly, we do not agree with Patent Owner’s arguments on required anonymity because this requirement is not recited in the claims.

Additionally, we have addressed Patent Owner’s arguments on the different functions of the elements in the discussion above on the preamble.

At this juncture, we determine that Petitioner has provided sufficient evidence that Mithyantha teaches limitation 1[b].

d) Limitations 1[c]–1[l]

For limitation 1[c], Petitioner asserts that, as shown in annotated Figure 1B, reproduced above, “[red] appliance 200’/200b (the claimed ‘second client device’) sends to a [blue] first server 106 (e.g. 106a) (the claimed “first web server”) an HTTP web request, which includes a URL

(the claimed ‘first content identifier’).” Pet. 45–46 (citing Ex. 1002 ¶¶ 104–105).

For limitation 1[d], Petitioner asserts that, as shown in annotated Figure 1B, reproduced above, “[red] appliance 200’/200b (the claimed ‘second client device’) receives from [blue] server 106a (the claimed ‘first web server’) an HTTP web response, which includes the identified web page (the claimed ‘first content’).” Pet. 46–47 (citing Ex. 1002 ¶¶ 107–111).

For limitation 1[e], Petitioner asserts that, as shown in annotated Figure 1B, reproduced above, “[red] appliance 200’/200b (the claimed ‘second client device’) sends to [purple] appliance 200/200a (the claimed ‘third server’) the identified web page content (the claimed ‘first content’).” Pet. 49–50 (citing Ex. 1002 ¶¶ 112–114).

For limitation 1[f], Petitioner asserts that, as shown in annotated Figure 1B, reproduced above, “[green] client 102a (the claimed ‘first client device’) receives from [purple] appliance 200/200a (the claimed ‘third server’) the identified web page content (the claimed ‘first content’).” Pet. 50–51 (citing Ex. 1002 ¶¶ 115–117).

For limitation 1[g], Petitioner asserts that an HTTP web request process to a new server may be repeated. Pet. 51 (citing Ex. 1020–121). That is, “[w]here the second HTTP web request refers to web content stored on a second server (e.g. server 106b), the second HTTP web request (following DNS resolution as discussed in Section VII.A) and subsequent response may traverse the same path” as that discussed for limitations 1[a]–1[f]. *Id.* at 52.

For limitation 1[h], Petitioner asserts that “the second HTTP web request and response may traverse the same path as discussed for Limitations 1[a]-1[f] except substituting server 106b for server 106a,” and

“appliance 200’/200b (the claimed ‘second client device’) receives from appliance 200/200a (the claimed ‘third server’) the second HTTP web request, which contains a second URL (the claimed ‘second content identifier’).” Pet. 53 (citing Ex. 1002 ¶¶ 122–123).

For limitation 1[i], Petitioner asserts that “the second HTTP web request and response may traverse the same path as discussed for Limitations 1[a]-1[f] except substituting server 106b for server 106a,” and “appliance 200’/200b (the claimed ‘second client device’) sends to a second server 106 (e.g. 106b) (the claimed ‘second web server’) the second HTTP web request, which contains a second URL (the claimed ‘second content identifier’).” Pet. 53–54 (citing Ex. 1002 ¶¶ 124–125).

For limitation 1[j], Petitioner asserts that “the second HTTP web request and response may traverse the same path as discussed for Limitations 1[a]-1[f] except substituting server 106b for server 106a,” and “appliance 200’/200b (the claimed ‘second client device’) receives from server 106b (the claimed ‘second web server’) an HTTP web response, which includes a second web page (the claimed ‘second content’).” Pet. 54 (citing Ex. 1002 ¶¶ 126–127).

For limitation 1[k], Petitioner asserts that “the second HTTP web request and response may traverse the same path as discussed for Limitations 1[a]-1[f] except substituting server 106b for server 106a,” and “appliance 200’/200b (the claimed ‘second client device’) sends to appliance 200/200a (the claimed ‘third server’) the second web page content (the claimed ‘second content’).” Pet. 54–55 (citing Ex. 1002 ¶¶ 128–129).

For limitation 1[l], Petitioner asserts that “the second HTTP web request and response may traverse the same path as discussed for Limitations 1[a]-1[f] except substituting server 106b for server 106a” and

“client 102a (the claimed ‘first client device’) receives from appliance 200/200a (the claimed ‘third server’) the second web page content (the claimed ‘second content’).” Pet. 55 (citing Ex. 1002 ¶¶ 130–131).

Patent Owner does not present any additional arguments on these limitations besides those addressed above. We have reviewed the evidence and argument presented and, at this juncture, we determine that Petitioner has provided sufficient evidence that Mithyantha teaches limitations 1[c]–1[l].

e) Limitation 1[m]

Petitioner argues that Mithyantha teaches limitation 1[m] because appliance 200’/200b (the second client device) may be deployed or executed on mobile phones, which is a “portable device that stores, operates, or uses, a mobile operating system.” Pet. 55–56 (citing Ex. 1002, 132–134; Ex. 1009, 13:65–14:2, 14:3–5, 16:58–64; Figs. 1E, 1F).

Patent Owner does not present any additional arguments on this limitation besides those addressed above. We have reviewed the evidence and argument presented and, at this juncture, we determine that Petitioner has provided sufficient evidence that Mithyantha teaches limitation 1[m].

f) Conclusion for Claim 1

For the reasons provided above, we conclude, on the current record, that Petitioner sufficiently demonstrates that it is more likely than not that claim 1 is obvious under 35 U.S.C. § 103 over Mithyantha.

2. Claims 2–27

Petitioner asserts that claims 2–27 are obvious over Mithyantha. Pet. 56–85.

Patent Owner argues that in its assertions as to claims 11 and 12 Petitioner did not use the correct dependencies because Petitioner failed to

account for the Certificate of Correction. Prelim. Resp. 22. As Patent Owner notes, claims 11 and 12 depend from claim 6, not claim 9, which is the incorrect dependency that Petitioner uses. *Id.*; see Pet. 69–72; see also Ex. 1001, 173:37–40; Ex. 1007, 1. We note that claim 6 depends from claim 5, which depends from claim 4, which then in turn depends on claim 1. Claim 9 depends from claim 6. Error in dependency notwithstanding, we find that the evidence and arguments provided by Petitioner are sufficient to demonstrate it is more likely than not that claims 11 and 12 would have been obvious.⁸ See Pet. 69–72. Patent Owner does not present any additional arguments directed to these claims.

We have reviewed the evidence and argument presented and, at this juncture, we determine that Petitioner has provided sufficient evidence that Mithyantha teaches claims 2–27.

We conclude, on the current record, that Petitioner sufficiently demonstrates that it is more likely than not that claims 2–27 are obvious under 35 U.S.C. § 103 over Mithyantha.

3. *Claim 19 Obviousness Under Mithyantha and RFC 2616*

Petitioner also asserts that claim 19 would have been obvious over Mithyantha and RFC 2616. Pet. 85–88.

Patent Owner does not present any additional arguments directed to this claim and ground. We have reviewed the evidence and argument presented and, at this juncture, we determine that Petitioner has provided sufficient evidence that the combination of Mithyantha and RFC2616

⁸ If anything, Petitioner’s assertions provide more support than required under dependency to claim 9 rather than claim 6. That is, dependency to claim 9 includes all the limitations of claim 6 and more.

teaches claim 17 and there is sufficient motivation to combine the references.

We conclude, on the current record, that Petitioner sufficiently demonstrates that it is more likely than not that claim 19 is obvious under 35 U.S.C. § 103 over Mithyantha and RFC 2616.

III. ANALYSIS OF THE § 101 GROUND

Petitioner argues that claims 1–27 are unpatentable because they are directed to the abstract idea “of sending internet requests and responses through an intermediary device,” and implementing the abstract idea “using generic and conventional components sending/receiving information to/from one another over standard Internet connections.” Pet. 88. As such, Petitioner contends, the claims are invalid under the two-part *Alice* test for patent ineligibility under 35 U.S.C § 101. *Id.* (citing *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 216-18 (2014) (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 78-79 (2012))).

Petitioner contends that “[t]he claim’s method steps (Limitations 1[a]-1[l]) recite nothing other than single-word functional recitations of ‘sending’ or ‘receiving’ ‘content identifiers’ or ‘content,’” which are “sending internet requests and responses through an intermediary device,” and are an abstract idea. Pet. 89. Petitioner analogizes the claims to alleged well-known communications in human interactions, such as the third-party intermediary clearing house of *Alice* or student communications. *Id.* at 95. Petitioner argues that the recitation for the second client device in limitation 1[m] does not save the claims. *Id.* at 89.

Petitioner asserts that the claim’s recitation of routing is “nothing beyond conventional transmission of web requests over intermediaries,”

such as that described RFC 2616. Pet. 90. Petitioner also refers to the '034 patent which indicates that the claimed devices are broadly described, such as a “client device,” that may be any of a lengthy list of device types, including both “a Personal Computer (PC)” and “a server computer.” *Id.* at 94 (citing Ex. 1001, 169:5–22).

Petitioner refers to the district court’s decision on a motion for judgment on the pleadings under § 101 for certain patents that include the related '614 patent.⁹ Pet. 91–94 (citing Ex. 1023). The motion was denied. *Id.* Petitioner asserts that in the district court, Patent Owner argued that its specification disclosed “a new type of consumer-based network that never existed before, these patents employ ‘client devices,’ which are consumer devices that operate as proxies.” *Id.* at 91 (citing Ex. 1022, 5, 29).

Petitioner contends that the district court denied the motion, in part, because of the alleged use of non-traditional client devices. *Id.* at 92 (citing Ex. 1023, 8–9, 12). Petitioner asserts that the district court’s conclusion on the motion cannot be reconciled based on the court’s own claim constructions. *Id.* Petitioner further contends that, although the district court relied on certain disclosures in the Specification in its decision, “it is not enough that the specification recite a technical problem and solution; it must be claimed.” *Id.* at 93 (citing *Yu v. Apple Inc.*, 1 F.4th 1040, 1045 (Fed. Cir. 2021)). Petitioner further argues that, contrary to Patent Owner’s allegations, the focus of the Specification “is an ‘agent’ fetching content from a ‘peer’ and avoiding a server,” and if “an ‘agent’ provided a speed advantage, it did so by avoiding servers, not acting as a proxy and contacting servers.” *Id.* at 94.

⁹ The '034 patent was not at issue in the motion. Ex. 1023.

In support of the eligibility of the claims, Patent Owner argues that the claim does not recite a traditional client/server architecture. Prelim. Resp. 22. Patent Owner asserts that Petitioner made the same arguments on the abstract idea to the district court, and the court did not agree with those arguments. *Id.* at 22–24. Patent Owner contends that it asserted, and the district court agreed, that “it is the use of non-traditional client devices that transforms the Asserted Claims into non-abstract subject matter.” *Id.* at 24 (citing Ex. 1023, 8–9). Patent Owner also points to alleged advantages of the invention related to traceability and anonymity, as well as solving problems associated with having content blocked or misinformation provided. *Id.* Patent Owner argues that claim 1 “recites servers and client devices in a specific configuration to solve technical problems related to improving the fetching of content from a web server.” *Id.* at 25.

Patent Owner additionally asserts that the claims “do not use conventional computers in a conventional way,” and “[t]raditional client devices do not operate as proxies.” Prelim. Resp. 25. Patent Owner contends that a person of ordinary skill in the art would understand that the claimed “second client device” is a smartphone, for example, and it was not conventional to use a smartphone as a proxy. *Id.* at 26. Patent Owner argues that the ’034 patent “require[s] specific components in a specific architecture including an intermediary client device modified to operate as a proxy,” and the Federal Circuit has found that “[s]oftware can make non-abstract improvements to computer technology just as hardware improvements can.” *Id.* (citing *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016)). Patent Owner also asserts that the district court’s conclusion that the claims were not abstract is consistent with Federal Circuit precedent. *Id.* at 26–27 (citing *Amdocs Isr. Ltd. v. Openet*

Telecom, Inc., 841 F.3d 1288, 1303 (Fed. Cir. 2016); *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014); *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1128 (Fed. Cir. 2018)).

Patent Owner contends that there should be no need to progress to step 2 of the *Alice* analysis. Prelim. Resp. 27. Nonetheless, Patent Owner asserts that the “generic mobile devices with standard mobile operating systems are not employed in a customary manner when modified by software to serve as proxies for servers,” and the “claims require a new network built from proxy client devices and require modification of a client device to serve as a proxy.” *Id.*

Because we base our decision to institute on the obviousness grounds discussed above, we need not determine at this stage of the proceeding whether Petitioner has sufficiently demonstrated that the challenged claims pass muster under § 101. However, given the broad interpretation of claim terms that we adopt for purposes of this decision, Petitioner’s arguments under § 101 may have merit. We note that the parties present disagreements on the nature of the invention and whether the alleged benefits of the invention are reflected in the claim, and, as Petitioner argues, consideration of those issues inform whether the claims recite an abstract idea as well as whether the elements of claim transform it into a patent-eligible invention. We believe that the record would benefit from further development of these issues.

We are guided in our evaluation as to whether a claim falls within an excluded category by Federal Circuit precedent and the Supreme Court’s two-step framework of *Alice*. *Alice*, 573 U.S. at 217–18. The USPTO has provided additional guidance on the application of 35 U.S.C. § 101. 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50, 57

(Jan. 7, 2019) (“2019 Guidance”). We encourage the parties to consider the 2019 Guidance, as well as Federal Circuit and Supreme Court precedent, in additional briefing on § 101 issues during trial.

IV. CONCLUSION

After considering the evidence and arguments presently before us, we determine Petitioner has demonstrated that it is more likely than not that at least one of the claims challenged is unpatentable. Accordingly, we institute a post-grant review.

V. ORDER

In consideration of the foregoing, it is:

ORDERED that, pursuant to 35 U.S.C. § 324(d), a post-grant review is instituted as to claims 1–27 of U.S. Patent No. 11,272,034 B2; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 324(d) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial, which commences on the entry date of this Order.

PGR2022-00052
Patent 11,272,034 B2

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