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Date: September 7, 2023

Paper 8

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ERICSSON INC., Petitioner,

v.

KONINKLIJKE KPN N.V., Patent Owner.

IPR2023-00581 Patent 8,886,772 B2

Before KEVIN F. TURNER, ROBERT J. WEINSCHENK, and NORMAN H. BEAMER, *Administrative Patent Judges*.

WEINSCHENK, Administrative Patent Judge.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

A. Background and Summary

Ericsson Inc. ("Petitioner") filed a Petition (Paper 1, "Pet.") requesting an *inter partes* review of claims 2–6, 11, 14, and 16 ("the challenged claims") of U.S. Patent No. 8,886,772 B2 (Ex. 1001, "the '772 patent"). Koninklijke KPN N.V. ("Patent Owner") filed a Preliminary Response (Paper 5, "Prelim. Resp.") to the Petition. With our authorization, Petitioner filed a Reply (Paper 6, "Reply") to the Preliminary Response, and Patent Owner filed a Sur-reply (Paper 7, "Sur-reply") to the Reply.

An *inter partes* review may not be instituted unless "the information presented in the petition . . . and any response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." 35 U.S.C. § 314(a). Further, a decision to institute may not institute on fewer than all claims challenged in the petition. 37 C.F.R. § 42.108(a). Here, Petitioner demonstrates a reasonable likelihood of prevailing in showing that at least one of the challenged claims is unpatentable. Thus, we institute an *inter partes* review of the challenged claims on all the grounds of unpatentability in the Petition.

B. Real Parties in Interest

Petitioner identifies itself and Telefonaktiebolaget LM Ericsson as the real parties in interest. Pet. 1. Patent Owner identifies itself as the only real party in interest. Paper 3, 2.

C. Related Matters

The parties indicate that the '772 patent is the subject of the following district court cases: 1) *Koninklijke KPN N. V. v. Telefonaktiebolaget LM Ericsson*, No. 2:22-cv-00282 (E.D. Tex.) ("District Court Litigation");

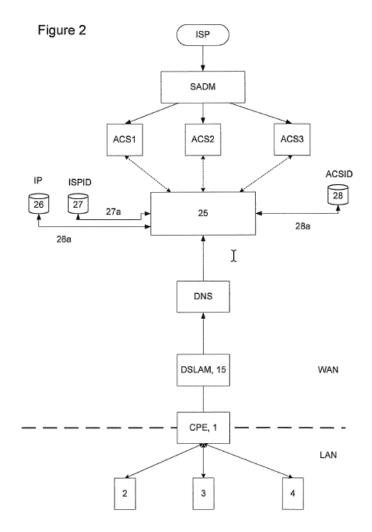
2) Koninklijke KPN N. V. v. Xiaomi Corporation, No. 1:21-cv-00041 (D. Del.); 3) Koninklijke KPN N. V. v. Samsung Electronics America, Inc., No. 2:14-cv-01165 (E.D. Tex.); and 4) Koninklijke KPN N. V. v. u-blox AG, No. 1:21-cv-00046 (D. Del.). Pet. 1; Paper 3, 2. The parties also indicate that the '772 patent is the subject of petitions for *inter partes* review in IPR2016-00808 and IPR2022-00025. Pet. 1–2; Paper 3, 2–3.

D. The '772 Patent

The '772 patent relates to "remote device management." Ex. 1001, 1:16–18. Specifically, the '772 patent states that an electronic device, such as Customer Premises Equipment ("CPE"), in a local network connects to an auto-configuration server ("ACS") "that is capable of providing service level settings for services available to the CPE." *Id.* at 1:26–29, 1:42–45.

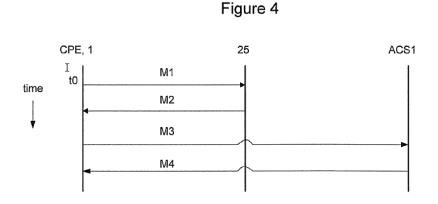
According to the '772 patent, prior systems "adversely required that each CPE... be pre-configured before installation... to specifically address the proper ACS," such as by preprogramming "the CPE with either a specific [Internet Protocol ("IP")] address or a specific [Uniform Resource Locator ("URL")]... for the dedicated ACS." *Id.* at 1:49–56.

To address that asserted deficiency, the '772 patent describes a system and method that allows configuration of "any type of manageable electronic device at any given location and within any level of service or group specification without pre-configuring a dedicated address for configuration." *Id.* at 2:22–25. Figure 2 of the '772 patent is reproduced below.



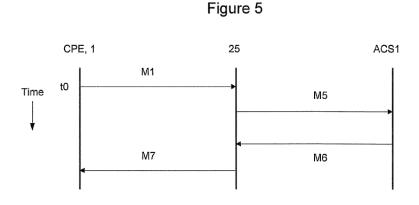
Id. at Fig. 2. Figure 2 "schematically shows an architecture for remote device management." *Id.* at 4:62–63. The architecture includes interfacing device CPE1, auto-configuration server manager ("ACSMD") 25, and auto-configuration servers ACS1, ACS2, ACS3. *Id.* at 4:66–5:3, 5:27–29. ACSMD 25 "is arranged for controlling access to" ACS1, ACS2, and ACS3. *Id.* at 5:8–10.

Figure 4 of the '772 patent is reproduced below.



Id. at Fig. 4. Figure 4 "schematically shows a signal flow in accordance with an embodiment." Id. at 7:7–8. Specifically, CPE1 sends message M1 requesting configuration data to ACSMD 25. Id. at 7:14–26. If the request is valid, ACSMD 25 replies to CPE1 with message M2 that includes the IP address for ACS1. Id. at 7:27–36. CPE1 then sends message M3 requesting configuration data to ACS1. Id. at 7:37–42. ACS1 replies to CPE1 with message M4 that includes the requested configuration data. Id. at 7:43–50.

Figure 5 of the '772 patent is reproduced below.



Id. at Fig. 5. Figure 5 "shows a further signal flow in accordance with an alternative embodiment." *Id.* at 7:51–52. Specifically, CPE1 sends message M1 requesting configuration data to ACSMD 25. *Id.* at 7:58–8:3. If the request is valid, ACSMD 25 relays the request as message M5 to ACS1. *Id.*

at 8:4–14. ACS1 replies to ACSMD 25 with message M6 that includes the requested configuration data. *Id.* at 8:20–27. ACSMD 25 then relays the requested configuration data as message M7 to CPE1. *Id.* at 8:28–37.

E. Illustrative Claim

Of the challenged claims, claim 2, which depends from claim 1, is illustrative. Claims 1 and 2 are reproduced below.

1. A system for remote device management comprising: a plurality of auto-configuration servers (ACSs); a manageable electronic device;

an auto-configuration server managing device (ACSMD) for controlling access to the ACSs communicatively coupled intermediately between the plurality of ACSs and the managed electronic device; and

at least one database communicatively coupled to the ACSM and storing information for the identification of electronic devices,

wherein the manageable electronic device is configured to send a request for configuration data to the ACSMD,

wherein configuration data comprise data for configuring the manageable electronic device, and

wherein the ACSMD is configured, responsive to receiving the request, to:

identify the manageable electronic device by comparing at least a portion of the request with the information for the identification of electronic devices of the at least one database, and

identify an ACS from the plurality of ACSs in accordance with the identification of the manageable electronic device to provide configuration data to the manageable electronic device, and

wherein the ACSMD is further configured to relay the request to the identified ACS.

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Ex. 1001, 9:52–10:10.

2. The system according to claim 1, wherein the ACSMD is further configured to receive a reply from the identified ACS, and relay the reply to the manageable electronic device.

Id. at 10:11–13.

F. Evidence

Petitioner submits the following evidence:

Evidence	Exhibit No.
Declaration of Dr. Daniel Blumenthal ("Blumenthal	1002
Declaration") Angelot, US 2009/0201830 A1, published Aug. 13, 2009	
("Angelot")	1006
Zakurdaev, US 2002/0073182 A1, published June 13, 2002	1007
("Zakurdaev")	1.007

Patent Owner submits the Declaration of Regis J. Bates (Ex. 2001, "Bates Declaration").

G. Asserted Grounds

Petitioner asserts that the challenged claims are unpatentable on the following grounds:

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
2–6, 11, 14, 16	102	Angelot
2–6, 11, 14, 16	103	Angelot
2–6, 11, 14, 16	103	Angelot, Zakurdaev

II. ANALYSIS

A. 35 U.S.C. § 314(a)

Patent Owner argues that we should exercise our discretion under 35 U.S.C. § 314(a) to deny the Petition in light of the District Court Litigation. Prelim. Resp. 65–70; Sur-reply 1–5. Section 314(a) states that

[t]he Director may not authorize an inter partes review to be instituted unless the Director determines that the information presented in the petition filed under section 311 and any response filed under section 313 shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.

Under § 314(a), we have discretion to deny institution of an *inter partes* review. *Cuozzo Speed Techs.*, *LLC v. Lee*, 136 S. Ct. 2131, 2140 (2016). We consider several factors when determining whether to deny institution under § 314(a) based on a parallel district court proceeding, specifically

- 1. whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;
- 2. proximity of the court's trial date to the Board's projected statutory deadline for a final written decision;
- 3. investment in the parallel proceeding by the court and the parties;
- 4. overlap between issues raised in the petition and in the parallel proceeding;
- 5. whether the petitioner and the defendant in the parallel proceeding are the same party; and
- 6. other circumstances that impact the Board's exercise of discretion, including the merits.

Apple Inc. v. Fintiv, Inc., IPR2020-00019, Paper 11 at 5–6 (PTAB Mar. 20, 2020) (precedential) ("Fintiv"). We also consider "several clarifications" made by the Director of the United States Patent and Trademark Office ("USPTO"). See USPTO Memorandum, Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation, 2 (June 21, 2022), available at https://www.uspto.gov/sites/default/files/documents/interim proc discretion

ary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf ("Director's Memo").

1. Factor 1 – Whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted

Under the first *Fintiv* factor, we consider "whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted." *Fintiv*, Paper 11 at 6. Petitioner argues that Patent Owner "conced[es]" in a related case that the first factor is neutral. Reply 1. Patent Owner argues that the first factor "favors denying institution" because 1) Petitioner "has not even moved for a stay" of the District Court Litigation; and 2) the District Court "generally do[es] not grant a stay pending an IPR." Prelim. Resp. 66–67.

Neither party identifies any statements by the District Court or other evidence that specifically address a stay of the District Court Litigation pending this proceeding. *See* Pet. 19; Prelim. Resp. 66–67; Reply 1; Surreply 4. We decline to speculate based on the record in this case whether the District Court would grant a stay of the District Court Litigation. *See Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15 at 12 (PTAB May 13, 2020) (informative) ("*Fintiv II*"). As a result, we determine that the first *Fintiv* factor is neutral.

2. Factor 2 – Proximity of the court's trial date to the Board's projected statutory deadline for a final written decision

Under the second *Fintiv* factor, we consider the "proximity of the court's trial date to the Board's projected statutory deadline for a final written decision." *Fintiv*, Paper 11 at 6. Petitioner argues that "[i]t is reasonable to expect" that the District Court's trial date of April 1, 2024, "will be rescheduled" because "six other cases" also are scheduled for trial

on the same day. Reply 1. Petitioner also argues that "there will almost certainly be additional post-trial motions addressing the invalidity issue" in the District Court Litigation "that go unaddressed by the final written decision deadline" in this case. *Id.* at 2. Petitioner concludes that the second factor "favors institution." *Id.* Patent Owner argues that the second factor favors "denying institution" because the District Court's trial date of April 1, 2024, is "at least five months before the expected date of the Board's final written decision." Prelim. Resp. 67–68; Sur-reply 1–2. According to Patent Owner, Petitioner's argument regarding possible post-trial motions is "irrelevant." Sur-reply 2.

The current trial date in the District Court Litigation is April 1, 2024. Ex. 2005, 1. The projected statutory deadline for a final written decision in this case is in September 2024. Thus, the current trial date in the District Court Litigation is about five months before the projected statutory deadline for a final written decision in this case. As a result, we determine that the second *Fintiv* factor favors discretionary denial of institution.

3. Factor 3 – Investment in the parallel proceeding by the court and the parties

Under the third *Fintiv* factor, we consider the "investment in the parallel proceeding by the court and the parties." *Fintiv*, Paper 11 at 6. Petitioner argues that "[t]he district court claim construction hearing, the close of discovery, and rulings on dispositive motions, Daubert motions, and motions in limine are all scheduled after the September 16, 2023 institution deadline." Reply 3–4. Petitioner also argues that it "diligently filed its Petition less than six weeks after it received Patent Owner's in fringement contentions . . . and well before serving initial invalidity contentions" in the

District Court Litigation. *Id.* at 2–3 (emphasis omitted). Petitioner thus contends that the third factor weighs "strongly in favor of institution." *Id.* at 4. Patent Owner argues that the third factor "favors denying institution" because the parties 1) exchanged infringement and invalidity contentions; 2) responded to discovery requests; 3) conducted a deposition; 4) produced and reviewed "a large volume of documents" and source code; and 5) started the claim construction process. Prelim. Resp. 68–69; Sur-reply 4.

The evidence of record indicates that the District Court and the parties have invested only minimal resources in the District Court Litigation as to issues of unpatentability involving the '772 patent. We recognize that Petitioner served invalidity contentions regarding the '772 patent. Ex. 2008. But the evidence of record indicates that the claim construction process and fact discovery are ongoing, expert discovery has not begun, and the deadline for dispositive motions is not until December 2023. Ex. 2005, 3–4. Further, Petitioner exercised reasonable diligence in filing the Petition about six weeks after receiving Patent Owner's disclosure of asserted claims and infringement contentions in the District Court Litigation. Pet. 72; Ex. 1022, 5. Thus, we determine that the third *Fintiv* factor weighs against

- discretionary denial of institution.
 - 4. Factor 4 Overlap between issues raised in the petition and in the parallel proceeding

Under the fourth *Fintiv* factor, we consider the "overlap between issues raised in the petition and in the parallel proceeding." *Fintiv*, Paper 11 at 6. Petitioner states that "if the Patent Trial and Appeal Board institutes an IPR in this proceeding on the grounds presented in the Petition, Petitioner will not pursue an invalidity defense in the district court action (C.A. No.

2:22-cv-282-JRG) that the patent claims subject to the instituted IPR are invalid based on the same grounds as in the Petition or on the references that are the bases for those grounds (*e.g.*, *Angelot* and *Zakurdaev*)." Reply 4–5. Patent Owner argues that "Petitioner's stipulation 'falls far short of a *Sotera*-type stipulation," and thus factor four "weighs somewhat against' denial." Sur-reply 2–3.

The Petition challenges claims 2–6, 11, 14, and 16, and relies on Angelot and Zakurdaev. Pet. 16–17. Petitioner's invalidity contentions in the District Court Litigation address claims 1–6, 10, and 11, and rely on Angelot and Zakurdaev. Ex. 2008, 1, 10–11. Nonetheless, Petitioner's stipulation that it will not rely on the grounds or references asserted in the Petition in the District Court Litigation mitigates to at least some degree concerns of duplicative efforts and potentially conflicting decisions. Reply 4–5; see Sand Revolution II, LLC v. Continental Intermodal Grp. – Trucking LLC, IPR2019-01393, Paper 24 at 12 (PTAB June 16, 2020) (informative). Thus, we determine that the fourth Fintiv factor weighs at least slightly against discretionary denial of institution.

5. Factor 5 – Whether the petitioner and the defendant in the parallel proceeding are the same party

Under the fifth *Fintiv* factor, we consider "whether the petitioner and the defendant in the parallel proceeding are the same party." *Fintiv*, Paper 11 at 6. Here, Petitioner is the defendant in the District Court Litigation. Prelim. Resp. 69; Reply 5. Under these circumstances, we determine that the fifth *Fintiv* factor favors discretionary denial of institution.

6. Factor 6 – Other circumstances that impact the Board's exercise of discretion, including the merits

Under the sixth *Fintiv* factor, we consider "other circumstances that impact the Board's exercise of discretion, including the merits." *Fintiv*, Paper 11 at 6. "[W]here the PTAB determines that the information presented at the institution stage presents a compelling unpatentability challenge, that determination alone demonstrates that the PTAB should not discretionarily deny institution under *Fintiv*." Director's Memo at 4–5. Petitioner argues that the Petition "presents a compelling unpatentability challenge of the '772 [p]atent, so the Board should not discretionarily deny institution." Reply 5. Patent Owner argues that its "arguments and evidence have raised substantial issues with the Petition, which shows Petitioner's evidence is not compelling." Prelim. Resp. 70.

On balance, we determine that *Fintiv* factors 1–5 do not favor discretionary denial of institution. Specifically, we determine that Petitioner's stipulation and reasonable diligence in filing the Petition as well as the parties' minimal investment in the District Court Litigation outweigh the projected trial date. *See* Director's Memo at 8 ("[W]hen analyzing the proximity of the court's trial date under factor two of *Fintiv*, when other relevant factors weigh against exercising discretion to deny institution or are neutral, the proximity to trial should not alone outweigh all of those other factors."). As a result, we need not decide whether Petitioner presents a compelling unpatentability challenge. *See CommScope Techs. LLC v. Dali Wireless, Inc.*, IPR2022-01242, Paper 23 at 4–5 (PTAB Feb. 27, 2023) (decision on Director review) (precedential) ("[I]n circumstances where the Board determines that the other *Fintiv* factors 1–5 do not favor discretionary

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denial, the Board shall decline to discretionarily deny under *Fintiv* without reaching the compelling merits analysis.").

7. Summary

Based on our holistic view of the *Fintiv* factors, we decline to exercise our discretion under § 314(a) to deny the Petition.

B. 35 U.S.C. § 325(d)

Patent Owner argues that the Petition should be denied under 35 U.S.C. § 325(d). Prelim. Resp. 52–54, 63–65. In determining whether to deny institution under § 325(d), we use

the following two-part framework: (1) whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office; and (2) if either condition of [the] first part of the framework is satisfied, whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims.

Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH, IPR2019-01469, Paper 6 at 8 (PTAB Feb. 13, 2020) (precedential).

1. Whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office

Under the first part of the *Advanced Bionics* framework, we consider "whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office." *Id*.

First, Patent Owner argues that Angelot previously was presented to the Office during prosecution of U.S. Application No. 14/938,056 ("the '056 application"), which is "a child of the '772 [p]atent." Prelim. Resp. 24,

64–65. Specifically, Patent Owner contends that the Examiner of the '056 application issued a rejection based on Angelot, and Patent Owner "overcame that rejection." *Id.* at 64–65. However, "[u]nder § 325(d), the art and arguments must have been previously presented to the Office *during proceedings pertaining to the challenged patent.*" *Advanced Bionics*, Paper 6 at 7 (emphasis added). Here, Patent Owner at most presents evidence that Angelot previously was presented to the Office during proceedings pertaining to an application that claims priority to the '772 patent. Prelim. Resp. 63–65. Patent Owner does not show that Angelot (or any arguments based on Angelot) previously were presented to the Office during proceedings pertaining to the '772 patent. *See id.*

Second, Patent Owner argues that Petitioner's evidence that relaying was known in the art is "cumulative of art cited by [Patent Owner] and considered by the Examiner during prosecution of the '772 [p]atent." Prelim. Resp. 52–54. For each asserted ground, Petitioner relies on Angelot for most of the claim limitations and relies on the allegedly cumulative art only to show that relaying was known in the art. Pet. 20–72. But, as discussed above, Patent Owner does not show that Angelot (or any arguments based on Angelot) previously were presented to the Office during proceedings pertaining to the '772 patent.

Thus, on this record, we are not persuaded that the same or substantially the same art or the same or substantially the same arguments previously were presented to the Office. As a result, the first part of the *Advanced Bionics* framework is not satisfied.

2. Whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims

Because the first part of the *Advanced Bionics* framework is not satisfied, we do not address the second part of the framework. *Advanced Bionics*, Paper 6 at 8.

3. Summary

For the reasons discussed above, we decline to exercise our discretion under § 325(d) to deny the Petition.

C. Level of Ordinary Skill in the Art

Petitioner argues that a person of ordinary skill in the art would have had "a B.S. in Electrical Engineering or a related field with at least five years of experience in designing communication systems." Pet. 16 (citing Ex. 1002 ¶¶ 34–39). Petitioner's description of the level of ordinary skill in the art is supported by the testimony of Petitioner's declarant, Dr. Daniel Blumenthal. Ex. 1002 ¶¶ 34–39. Patent Owner does not dispute Petitioner's description at this stage of the proceeding. Prelim. Resp. 25. We adopt Petitioner's description for purposes of this Decision.

D. Claim Construction

In an *inter partes* review proceeding, a patent claim is construed using the same standard used in a civil action under 35 U.S.C. § 282(b), including construing the claim in accordance with the ordinary and customary meaning of the claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent. 37 C.F.R. § 42.100(b). Petitioner notes that several claim terms previously were construed by a district court in another case. Pet. 13–15. Petitioner also notes that the Petition analyzes the challenged claims under both the district court's

construction of the term "relay" as "change, process, or otherwise manage a request based at least in part on its payload," and Patent Owner's understanding that "relay" means "send" or "pass." *Id.* at 15–16. Patent Owner argues that we should adopt the district court's construction of the term "relay" as "change, process, or otherwise manage a request based at least in part on its payload." Prelim. Resp. 26–27. According to Patent Owner, Petitioner "incorrect[ly] claim[s] that [Patent Owner's] 'current understanding' is that 'relay' means 'send' or 'pass.'" *Id.* at 27.

We determine that no claim terms require express construction for purposes of this Decision. As discussed below, even if we assume that the term "relay" means "change, process, or otherwise manage a request based at least in part on its payload," Petitioner shows sufficiently that at least one of the challenged claims is unpatentable. *See* Section II.E.1. As a result, we need not address this particular claim construction issue in order to resolve the parties' disputes about the asserted grounds of unpatentability.

E. Anticipation of Claims 2–6, 11, 14, and 16 by Angelot
Petitioner argues that claims 2–6, 11, 14, and 16 are anticipated by
Angelot. Pet. 20–55. For the reasons discussed below, Petitioner
demonstrates a reasonable likelihood of prevailing in showing that at least
one of the challenged claims is anticipated by Angelot.

1. Claim 2

Claim 2 depends from claim 1, and thus includes the limitations of claim 1. Ex. 1001, 10:11–13. As a result, we address the limitations of both claims 1 and 2 below.

Claim 1 recites "[a] system for remote device management."

Ex. 1001, 9:52. Petitioner presents evidence that Angelot discloses a system

for configuring network entities with the requisite settings to participate within a network. Pet. 20–24 (citing Ex. $1006 \, \P \, 3$). Patent Owner does not dispute that Angelot discloses the preamble of claim 1. On this record, Petitioner shows sufficiently that Angelot discloses the preamble of claim $1.^{1}$

Claim 1 recites "a plurality of auto-configuration servers (ACSs)." Ex. 1001, 9:53. Petitioner presents evidence that Angelot discloses a plurality of configuration servers. Pet. 24–26 (citing Ex. 1006 ¶ 52, Fig. 1). Patent Owner does not dispute that Angelot discloses this limitation of claim 1. On this record, Petitioner shows sufficiently that Angelot discloses this limitation of claim 1.

Claim 1 recites "a manageable electronic device." Ex. 1001, 9:54. Petitioner presents evidence that Angelot discloses a network entity. Pet. 26–27 (citing Ex. 1006 ¶¶ 43, 46–47, Fig. 1). Patent Owner does not dispute that Angelot discloses this limitation of claim 1. On this record, Petitioner shows sufficiently that Angelot discloses this limitation of claim 1.

Claim 1 recites "an auto-configuration server managing device (ACSMD) for controlling access to the ACSs communicatively coupled intermediately between the plurality of ACSs and the managed electronic device." Ex. 1001, 9:55–58. Petitioner presents evidence that Angelot discloses a central server coupled between the configuration servers and the network entity that controls access to the configuration servers. Pet. 27–29 (citing Ex. 1006 ¶¶ 47, 54, Fig. 1). Patent Owner does not dispute that

¹ Because Petitioner presents evidence that the prior art discloses the recitations in the preamble of claim 1, at this stage of the proceeding, we need not decide whether the preamble is limiting.

Angelot discloses this limitation of claim 1. On this record, Petitioner shows sufficiently that Angelot discloses this limitation of claim 1.

Claim 1 recites "at least one database communicatively coupled to the ACSM and storing information for the identification of electronic devices." Ex. 1001, 9:59–61. Petitioner presents evidence that Angelot discloses a database coupled to the central server that stores the media access control ("MAC") addresses of electronic devices. Pet. 29–30 (citing Ex. 1006 ¶ 51, Figs. 1, 3a). Patent Owner does not dispute that Angelot discloses this limitation of claim 1. On this record, Petitioner shows sufficiently that Angelot discloses this limitation of claim 1.

Claim 1 recites "wherein the manageable electronic device is configured to send a request for configuration data to the ACSMD." Ex. 1001, 9:62–63. Petitioner presents evidence that Angelot's network entity sends a request for configuration settings to the central server. Pet. 31–32 (citing Ex. 1006 ¶ 54, Figs. 1, 2). Patent Owner does not dispute that Angelot discloses this limitation of claim 1. On this record, Petitioner shows sufficiently that Angelot discloses this limitation of claim 1.

Claim 1 recites "wherein configuration data comprise data for configuring the manageable electronic device." Ex. 1001, 9:64–65.

Petitioner presents evidence that Angelot's configuration settings are specific to the network entity. Pet. 32–34 (citing Ex. 1006 ¶¶ 52, 54–55, 62). Patent Owner does not dispute that Angelot discloses this limitation of claim 1. On this record, Petitioner shows sufficiently that Angelot discloses this limitation of claim 1.

Claim 1 recites "wherein the ACSMD is configured, responsive to receiving the request, to: identify the manageable electronic device by

comparing at least a portion of the request with the information for the identification of electronic devices of the at least one database." Ex. 1001, 9:66–10:4. Petitioner presents evidence that Angelot's central server identifies the network entity by comparing a MAC address in the request with MAC addresses in the database. Pet. 34–36 (citing Ex. 1006 ¶¶ 51, 54, Figs. 2, 3a). Patent Owner does not dispute that Angelot discloses this limitation of claim 1. On this record, Petitioner shows sufficiently that Angelot discloses this limitation of claim 1.

Claim 1 recites "wherein the ACSMD is configured, responsive to receiving the request, to: . . . identify an ACS from the plurality of ACSs in accordance with the identification of the manageable electronic device to provide configuration data to the manageable electronic device." Ex. 1001, 10:5–8. Petitioner presents evidence that Angelot's central server identifies a configuration server from the plurality of configuration servers in accordance with the network entity's MAC address. Pet. 36–38 (citing Ex. 1006 ¶ 23, 52, 54, Fig. 3a). Patent Owner does not dispute that Angelot discloses this limitation of claim 1. On this record, Petitioner shows sufficiently that Angelot discloses this limitation of claim 1.

Claim 1 recites "wherein the ACSMD is further configured to relay the request to the identified ACS." Ex. 1001, 10:9–10. Petitioner presents evidence that Angelot's central server processes the request based on the MAC address included therein and sends the request to the appropriate configuration server. Pet. 38–42 (citing Ex. 1006 ¶¶ 19, 25, 46–47, 52, 54–55, 62, Figs. 1, 2).

Patent Owner responds that Petitioner does not show sufficiently that Angelot's central server is configured to "relay" the request to the identified configuration server. Prelim. Resp. 29–34. As discussed above, the district court in another case construed the term "relay" to mean "change, process, or otherwise manage a request based at least in part on its payload." *Id.* at 26–27. Patent Owner argues that Angelot's use of the terms "redirect" and "forward" does not satisfy the district court's construction of "relay." *Id.* at 29–33 (citing Ex. 2001 ¶¶ 106, 113–119). Patent Owner also contends that Angelot's use of the term "process" is insufficient because Angelot "never refers to 'payload' or processing based on payload." *Id.* at 33–34.

On this record, Patent Owner's argument is unavailing. Angelot discloses that "the central server 14 receives a request for configuration settings" that "includes" the network entity's "MAC address." Ex. 1006 ¶ 54 (emphasis added). Angelot further discloses that "[u]pon receipt of the request, the central server 14 processes the request to determine whether the first mapping table comprises the unique MAC address associated with the request, and also determines which of the plurality of service providers 18a, 18b, 18c the MAC address belongs to." *Id.* (emphasis added). Thus, consistent with the district court's construction of the term "relay," Angelot discloses that the central server "processes" the request based on the MAC address "include[d]" in the payload of the request. *Id.*

Claim 2 depends from claim 1, and recites "wherein the ACSMD is further configured to receive a reply from the identified ACS, and relay the reply to the manageable electronic device." Ex. 1001, 10:11-13. Petitioner presents evidence that Angelot's central server receives a reply from the configuration server and then sends the configurations settings to the appropriate network entity. Pet. 43-44 (citing Ex. 1006 ¶¶ 47, 51-52, 62). Petitioner also presents evidence that the reply from the configuration server

includes the network entity's MAC address, and thus Angelot's central server processes the reply based on the MAC address and sends the configuration settings to the appropriate network entity. *Id.* at 44–46 (citing Ex. 1002 ¶ 135; Ex. 1006 ¶¶ 52, 62, Figs. 1, 3a).

Patent Owner responds that Petitioner does not show sufficiently that Angelot's central server is configured to "relay" the reply to the network entity. Prelim. Resp. 29–48. First, Patent Owner argues that Petitioner improperly relies on different embodiments in Angelot, namely, Petitioner relies on Angelot's paragraph 54 embodiment to show that the central server relays a *request* to the configuration server and relies on Angelot's paragraph 62 embodiment to show that the central server relays a *reply* to the network entity. *Id.* at 35–41 (citing Ex. 2001 ¶¶ 125–127). Patent Owner contends that those embodiments are "distinct teachings," and thus Angelot does not disclose the elements of claim 2 as arranged in the claim. *Id.* at 35, 41 (citing Ex. 2001 ¶¶ 120–128). In particular, Patent Owner asserts that Angelot's paragraph 62 embodiment is distinct because the central server "directly request[s]" configuration settings, and thus "the request does not originate from the network entity." *Id.* at 41–46 (citing Ex. 2001 ¶¶ 135, 138–139).

On this record, Patent Owner's argument is unavailing. Patent Owner interprets Angelot's paragraph 62 as describing an embodiment in which the central server does *not* receive a request from a network entity. *Id.* We disagree. Paragraph 62 states that the central server "serves as a proxy or *intermediary*, by communicating with one of the configuration servers 20a, 20b, or 20c to directly *request* and acquire the configuration settings data, and *then forwarding* the configuration setting data to the network entity

12a." Ex. 1006 ¶ 62 (emphases added). This sentence indicates that the central server acts as an "intermediary" between the network entity and the configuration server, and thus receives both a request from the network entity and a reply from the configuration server. *Id.* This is consistent with Angelot's claim 13, which recites a system in which the central server acts as an "intermediary" by receiving a request from a network entity, redirecting the request to an appropriate configuration server, and then passing the reply from the configuration server to the network entity. *Id.* at claims 9, 13; *see* Pet. 44 (citing Ex. 1006, claim 13).

Further, Angelot's paragraph 54 describes in detail how the central server processes a request from a network entity in order to select the appropriate configuration server. Ex. $1006 \, \P \, 54$. Although Angelot's paragraph 62 also describes an embodiment in which the central server receives a request from a network entity, paragraph 62 does not repeat the details from paragraph 54. *Id.* $\P \, 54$, 62. Thus, a person of ordinary skill in the art would have considered paragraph 54 to understand how the central server in Angelot's paragraph 62 embodiment processes a request from a network entity. Ex. $1002 \, \P \, 126$, 128-129. As a result, we determine that the cited disclosures from paragraphs 54 and 62 are not distinct teachings.

Second, Patent Owner argues that "there is simply no teaching or suggestion" in Angelot that the central server processes the reply based on the MAC address in order to send the configuration settings to the appropriate network entity. Prelim. Resp. 46–48. On this record, Patent Owner's argument is unavailing. Paragraph 52 of Angelot discloses that a configuration server can send configuration settings directly to an appropriate network entity based on the network entity's MAC address.

Ex. 1006 ¶ 52. Paragraph 62 of Angelot discloses that the central server also can send configuration settings to a network entity, but does not repeat the details from paragraph 52 that describe using the MAC address to select the appropriate network entity. *Id.* ¶ 62. Thus, a person of ordinary skill in the art would have considered paragraph 52 to understand how the central server in Angelot's paragraph 62 embodiment processes a reply from the configuration server based on the included MAC address and sends it to the appropriate network entity. Ex. 1002 ¶ 135.

For the foregoing reasons, on this record, Petitioner shows sufficiently that Angelot discloses the limitations of claim 2.

2. *Claim 3*

Claim 3 depends from claim 1, and recites "wherein the ACSMD is further configured to identify the type of manageable electronic device by comparing a network address of the manageable electronic device in the request with a predetermined plurality of network addresses in the at least one database." Ex. 1001, 10:15–20. Petitioner presents evidence that Angelot discloses identifying the manufacturer of the network entity by comparing a MAC address in the request with a plurality of MAC addresses in the database. Pet. 46–48 (citing Ex. 1006 ¶¶ 49, 55).

Patent Owner responds that Petitioner does not show sufficiently that Angelot discloses identifying the type of network entity by comparing a network address in the request with network addresses in the database. Prelim. Resp. 49–52. First, Patent Owner argues that Angelot's MAC address is "at most a link layer identifier unique to a device," not a network address. *Id.* at 50–51 (citing Ex. 2001 ¶¶ 144–148). On this record, Patent Owner's argument is unavailing. Neither party provides an express

construction of the term "network address." See Pet. 13–16; Prelim. Resp. 25–29, 49–50. Further, the portion of Angelot cited by Petitioner discloses that "[t]he MAC address is associated with the IP phone 12a's network interface adapter for coupling to network 16." Ex. $1006 \, \P \, 49$ (emphases added). At this stage of the proceeding, we find that disclosure sufficient to show that Angelot's MAC address is a network address.

Second, Patent Owner argues that identifying a manufacturer of the network entity, as disclosed in Angelot, is "not identifying a type of device." Prelim. Resp. 51–52 (citing Ex. 2001 ¶ 148). On this record, we agree with Patent Owner. Petitioner does not explain specifically how identifying the manufacturer of the network entity discloses identifying the type of network entity. See Pet. 46–48. Further, the '772 patent appears to indicate that the manufacturer of a device is different than the type of device. See, e.g., Ex. 1001, 7:21–26 ("an identification of the type... of the manageable electronic device and optionally additional identification, for example the identity of the supplier/manufacturer of the device."). Nonetheless, because we determine that Petitioner demonstrates a reasonable likelihood of prevailing on at least one of the challenged claims, we also institute an interpartes review of claim 3. Patent Owner may raise its arguments regarding claim 3 again in its response to the Petition after institution.

3. Claims 4–6, 11, 14, and 16

Dependent claims 4–6 depend, directly or indirectly, from claim 3. Petitioner presents evidence that Angelot discloses the additional limitations of claims 4–6. Pet. 48–50. But, as discussed above, we agree with Patent Owner that, on this record, Petitioner does not show sufficiently that Angelot discloses the limitations of claim 3. *See* Section II.E.2. Nonetheless,

because we determine that Petitioner demonstrates a reasonable likelihood of prevailing on at least one of the challenged claims, we also institute an *inter* partes review of claims 4–6.

Dependent claims 11, 14, and 16 recite limitations similar to claim 2 discussed above. Ex. 1001, 10:55–12:5, 12:10–39. Petitioner presents evidence that Angelot discloses the limitations of claims 11, 14, and 16. Pet. 51–55. Other than the arguments discussed above for claim 2, Patent Owner does not dispute that Angelot discloses the limitations of claims 11, 14, and 16. Prelim. Resp. 29–48. On this record, Petitioner shows sufficiently that Angelot discloses the limitations of claims 11, 14, and 16.

4. Summary

For the foregoing reasons, Petitioner demonstrates a reasonable likelihood of prevailing in showing that at least one of the challenged claims is anticipated by Angelot.

F. Obviousness of Claims 2–6, 11, 14, and 16 over Angelot
Petitioner argues that claims 2–6, 11, 14, and 16 would have been
obvious over Angelot. Pet. 55–67. Petitioner contends that to the extent
Angelot does not disclose that the central server relays a request to the
configuration server or relays a reply to the network entity, it would have
been obvious to do so. Id. at 55–56. Specifically, Petitioner presents
evidence that relaying information was known in the art. Id. at 56–58 (citing
Ex. 1001, 5:56–61; Ex. 1002 ¶¶ 150–153). Petitioner also presents evidence
that a person of ordinary skill in the art would have had reason to modify
Angelot so that the central server relays a request to the configuration server
and relays a reply to the network entity. Id. at 58–67 (citing Ex. 1002 ¶¶
154–165). For example, according to Petitioner, it would have been obvious

to process a request based on the included MAC address to ensure that the appropriate configuration server receives the request. *Id.* at 58-61 (citing. Ex. 1002 ¶¶ 154-156). Similarly, it would have been obvious to process a reply based on the included MAC address to ensure that the appropriate network entity receives the reply. *Id.* at 61-63 (citing Ex. 1002 ¶¶ 157-159).

Patent Owner responds that Petitioner does not show sufficiently that it would have been obvious to modify Angelot's central server to relay a request to the configuration server and relay a reply to the network entity. Prelim. Resp. 54–58. Specifically, Patent Owner argues that Petitioner only shows that "Angelot *could* be modified to use relaying," not that a person of ordinary skill in the art would have been "motivated to make such a modification." *Id.* at 56–57 (citing Ex. 2001 ¶¶ 152–154). Patent Owner also argues that Petitioner's reasons for modifying Angelot "are based on a solution to a problem that simply does not exist in Angelot." *Id.* at 58.

On this record, Patent Owner's argument is not persuasive. Petitioner's evidence does not show only that Angelot's central server could have been modified to use relaying. As discussed above, Petitioner provides evidence that a person of ordinary skill in the art would have had a reason to modify Angelot's central server to use relaying, namely, to ensure that the appropriate configuration server receives a request and the appropriate network entity receives a reply. Ex. 1002 ¶¶ 154–159. Further, Petitioner does not need to show that modifying Angelot's central server to use relaying "was an 'improvement' in a categorical sense." *See Intel Corp. v. PACT XPP Schweiz AG*, 61 F.4th 1373, 1381 (Fed. Cir. 2023). Rather,

Petitioner only needs to show that relaying a request and a reply was a "suitable option." *See id*.

For the foregoing reasons, Petitioner demonstrates a reasonable likelihood of prevailing in showing that at least one of the challenged claims would have been obvious over Angelot.

G. Obviousness of Claims 2–6, 11, 14, and 16 over Angelot and Zakurdaev

Petitioner argues that claims 2–6, 11, 14, and 16 would have been obvious over Angelot and Zakurdaev. Pet. 67–72. Petitioner contends that to the extent Angelot does not disclose that the central server relays a request to the configuration server or relays a reply to the network entity, it would have been obvious to do so. *Id.* at 67. Specifically, Petitioner presents evidence that Zakurdaev teaches a Dynamic Host Control Protocol ("DHCP") relay that analyzes and forwards an IP address request from a user terminal to a corresponding ISP, and also maps and forwards an IP address reply from the ISP to the user terminal. *Id.* at 67–69 (citing Ex. 1007 ¶ 12, 14, 24–27, Fig. 2). Petitioner also presents evidence that a person of ordinary skill in the art would have had reason to use Zakurdaev's DHCP relay in Angelot's system. *Id.* at 69–72 (citing Ex. 1002 ¶¶ 171– 176). For example, because Angelot teaches using DHCP settings but does not provide details on implementing that functionality, a person of ordinary skill in the art would have used Zakurdaev's DHCP relay to implement Angelot's DHCP functionality. *Id.* at 70 (citing Ex. $1002 \, \P \, 172$).

Patent Owner responds that Petitioner does not show sufficiently that Zakurdaev teaches relaying a request or a reply. Prelim. Resp. 58–61. In particular, Patent Owner argues that Zakurdaev's DHCP relay is "a relay device that forwards—not relays." *Id.* at 59 (citing Ex. 1007 ¶ 12; Ex. 2001

¶¶ 156–158). On this record, Patent Owner's argument is unavailing. Zakurdaev teaches that the DHCP relay "analyzes" the request from the user terminal based on the included MAC address and then sends it to the corresponding ISP. Ex. 1007 ¶ 26 (emphasis added). Zakurdaev also teaches that the DHCP relay "stores (maps)" the IP address reply from the ISP and then sends it to the user terminal. Id. ¶27 (emphasis added). Thus, consistent with the district court's construction of the term "relay," Zakurdaev teaches that the DHCP processes the request and the reply. Id. ¶¶ 26–27.

For the foregoing reasons, Petitioner demonstrates a reasonable likelihood of prevailing in showing that at least one of the challenged claims would have been obvious over Angelot and Zakurdaev.

III. CONCLUSION

Petitioner demonstrates a reasonable likelihood of prevailing in showing that at least one of the challenged claims is unpatentable.

Accordingly, we institute an *inter partes* review on all grounds of unpatentability in the Petition. At this stage of the proceeding, we have not made a final determination with respect to the patentability of any of the challenged claims.

IV. ORDER

It is hereby

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 2–6, 11, 14, and 16 of the '772 patent is instituted with respect to all grounds of unpatentability set forth in the Petition; and

FURTHER ORDERED that, pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4(b), *inter partes* review of the '772 patent shall commence

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on the entry date of this Order, and notice is hereby given of the institution of a trial.

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