

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ERICSSON INC.,
Petitioner,

v.

KONINKLIJKE KPN N.V.,
Patent Owner.

Case IPR2023-00581
Patent 8,886,772

PATENT OWNER'S RESPONSE

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PATENT OWNER’S EXHIBIT LIST

Exhibit	Description
2001	Declaration of Mr. Regis J. (Bud) Bates, Jr. in Support of Patent Owner dated June 15, 2023
2002	Curriculum Vitae of Regis J. (Bud) Bates, Jr.
2003	U.S. Patent No. 9,838,256 (“the Child ‘256 Patent”)
2004	U.S. Patent No. 8,089,953 (“Angelot Patent”)
2005	First Amended Docket Control Order in <i>Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson</i> , 22-cv-00282 (E.D. Tex.) (D.I. 101)
2006	United States District Courts – National Judicial Caseload Profile, https://www.uscourts.gov/sites/default/files/data_tables/fcms_na_distprofile0331.2023.pdf
2007	Docket Sheet for <i>Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson</i> , 22-cv-00282-JGR (E.D. Tex.)
2008	Ericsson’s P.R. 3-3 Invalidity Contentions in <i>Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson</i> , 22-cv-00282-JGR (E.D. Tex.)
2009	Ericsson’s Response in Opposition to KPN’s Motion for Leave to Amend Infringement Contentions in <i>Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson</i> , 22-cv-00282 (E.D. Tex.)
2010	Declaration of Mr. Regis J. (Bud) Bates, Jr. in Support of Patent Owner dated December 4, 2023
2011	Updated Curriculum Vitae of Regis J. (Bud) Bates, Jr.
2012	Claim Construction Order in <i>Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson</i> , 22-cv-00282-JGR, Dkt. No. 176 (E.D. Tex. Oct. 13, 2023)
2013	Order in <i>Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson</i> , 22-cv-00282-JGR, Dkt. No. 195 (E.D. Tex. Nov. 2, 2023)
2014	Transcript of <i>Markman</i> Hearing October 3, 2023 in <i>Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson</i> , 22-cv-00282-JGR (E.D. Tex.)

I. INTRODUCTION

At the time of the invention, prior art device management involved pre-configuring of IP addresses or ULRs of dedicated auto-configuration servers (ACSs), which was time consuming and sensitive to errors and mistakes. EX1001, 1:53-60. U.S. Patent 8,886,772 (“the ’772 Patent”) describes an auto-configuration server managing device (ACSMD) that selects an ACS that meets the configuration needs of a manageable electronic device, which reduces complexity and errors by allowing multiple devices to be pre-configured with the same ACSMD address. EX1001, 6:52-55. The Board has denied two previous petitions against the ’772 Patent,¹ and Patent Owner Koninklijke KPN N.V. (“KPN”) submits that this third Petition fails to establish that any of Claims 2-6, 11, 14, and 16 of the ’772 Patent (“the Challenged Claims”) are unpatentable.

The Petition presents one proposed anticipation ground (Ground 1) and two proposed obviousness grounds (Grounds 2 and 3). Contrary to the Petitioner’s

¹ *Samsung Elecs. Co. v. Koninklijke KPN N.V.*, IPR2016-00808, Paper 6 (PTAB Sep. 19, 2016); *Xiaomi Communications Co., Ltd. v. Koninklijke KPN NV*, IPR2022-00025, Paper 6 (PTAB Apr.19, 2022) (KPN disclaimed claims 1, 7-10, 12, 13 and 15; not instituted).

arguments, the Challenged Claims each recite limitations not disclosed, taught, or suggested by the alleged prior art Angelot and Zakurdaev.

With respect to Ground 1, the Board found in the Institution Decision that “Petitioner does not show sufficiently that Angelot discloses the limitations of claim 3” and that finding also applies to Claims 4-6, which depend from Claim 3. Paper 8 (“ID”), 25-26. KPN reiterates its arguments for Claim 3 in this Response, namely, Angelot does not disclose “wherein the ACSMD is further configured to identify the type of the 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.”

Although Angelot discusses that a MAC address can be used to identify the manufacturer of a network device or a “class of device” (EX1006, ¶[0059]), Angelot fails to disclose that a MAC address can be used to identify the “type” of network device as required by Claim 3. Further, the claimed “network address” is, for example, an IP address, and Angelot discloses at most using a MAC address, which is a hardware identifier on a data link, not a network address at a network layer. Petitioner’s Grounds 2 and 3 do not apply to Claims 3-6: Petitioner did not argue that Angelot would have rendered obvious the limitation of Claim 3, and Petitioner did not argue that Zakurdaev teaches Claim 3.

Further, with respect to Ground 1, Angelot does not disclose “relay the request” recited in [1h]² or “relay the reply” recited in Claim 2. At most, Angelot discloses that a central server may “redirect” or “forward” configuration settings—but not “relay” them. Petitioner’s attempts to substitute the term “relay” for the term “forward” in Angelot are improper. After the Board’s Institution Decision, the District Court construed “relay” in parallel litigation between KPN and Petitioner and rejected Petitioner’s proposed construction of “relay” as “send.” EX2012, 46. Two District Courts have confirmed that “relay” is different from “forward” and “send.”³

Angelot ¶[0054]’s use of “processes” does not disclose “relay” because Angelot never refers to payload. Further, Petitioner improperly maps Angelot’s sole teaching of “processes” to distinct processing in two different limitations: part of [1g] (“the ACSMD is configured, responsive to receiving the request, to identify the manageable electronic device by comparing at least a portion of the request”) and [1h] (“the ACSMD is further configured to relay the request”).

² For the Response, KPN has used the Petition’s labeling of Claim 1’s limitations.

³ The District Courts found that “relay” recited in the Challenged Claims involves “change, process, or otherwise manage a request based at least in part on its payload.” EX2012, 46; EX1005, 60-61.

Petitioner’s attempts to combine multiple embodiments of Angelot, i.e., the embodiment of ¶¶[0043]-[0054] with the embodiment of ¶[0062], to arrive at “relay the reply” recited in Claim 2 is improper. But even allowing, *arguendo*, for combining distinct embodiments of Angelot, Angelot still fails to anticipate Claim 2 because ¶[0052] does not disclose forwarding anything to an IP phone based on MAC address.

The ¶[0062] embodiment of Angelot does not disclose what triggers the redirect server to “directly request” configuration settings from the configuration server. In contrast, Claim 2 requires that the ACSMD make that request responsive to receiving a request for configuration data from a manageable electronic device. Further, the ¶[0062] embodiment of Angelot also does not disclose that the server 14 does any type of “processing” of a reply when “forwarding” configuration settings. A POSITA would not have considered ¶[0052] or ¶[0054] to understand ¶[0062].

With respect to Ground 2, Petitioner’s assertion it would have been obvious to modify Angelot’s disclosure of “redirecting” and “forwarding” with relaying falls flat. Petitioner misapplies Jin and the phrase “as known in the art” in the ’772 Patent. KPN secured allowance of the ’772 Patent by citing numerous references explicitly discussing how “relaying” differs from “forwarding,” and thus Jin’s discussion of a “Subnet Relay Agent” is cumulative.

Petitioner fails to prove motivation to modify Angelot to use relaying instead of forwarding. The Petition's assertions regarding modifying Angelot amount to no more than suggesting Angelot could be modified to use relaying, and are based on a solution to a problem that simply does not exist in Angelot. Petitioner seeks to substitute redundant features to Angelot, without explaining why a POSITA would have concluded Angelot needed to be modified.

With respect to Ground 3, Zakurdaev also fails to teach "relay" recited in [1h] and Claim 2. Zakurdaev describes only a "relay" device that forwards—not relays. As with Angelot, Petitioner's attempts to substitute the term "relay" for the term "forward" in Zakurdaev are improper. Zakurdaev's teaching of storing the IP address in ¶[0027] is not processing the reply based on its payload and thus is not consistent with the two District Courts' constructions of "relay."

Further, Petitioner fails to prove motivation to combine Angelot with Zakurdaev. Petitioner has provided no reason why a POSITA would have combined (i) Zakurdaev's DHCP server and Angelot's configuration server, and (ii) Zakurdaev's DHCP Smart Relay and Angelot's central server, where Angelot teaches that the IP phone first gets an IP address directly from a DHCP server. Petitioner's combination is also redundant: Zakurdaev does not teach anything beyond what Angelot teaches regarding forwarding, and Petitioner has not shown that Zakurdaev's DHCP teachings are any different from those of Angelot in

connection with sending messages between the IP phone and the configuration server via the central server.

With respect to all of Petitioner's grounds, Angelot does not teach or suggest "identify an ACS from the plurality of ACSs in accordance with the identification of the manageable electronic device" recited in part of [1g]. In view of ¶[0054], Angelot might be interpreted as teaching at most to "identify [*a service provider*] from the plurality of [*service providers*] in accordance with the identification of the manageable electronic device." But a "service provider" cannot be equated with a "configuration server" in Angelot, something made clear by Figure 3a, which shows that a "service provider" may host multiple "configuration servers." Thus, Petitioner's interpretation of the "configuration server" in Angelot as the "ACS" fails to align Angelot's teaching with "identify an ACS from the plurality of ACSs in accordance with the identification of the manageable electronic device."

Petitioner has disavowed each-service-provider-includes-one-configuration server interpretation of Angelot in the parties' parallel litigation. Petitioner relies on the first mapping table and Figure 3a for its mapping of multiple different limitations and Challenged Claims. Deeming Figure 3a to be a separate embodiment would be inconsistent with Petitioner's reliance on the combination of embodiments of Angelot for Ground 1. Claims 11, 14, and 16 recite similar subject matter as Claim 2, and are patentable over Angelot and Zakurdaev for at least the same reasons.

This is all supported by testimony of Regis (Bud) Bates, Jr. (EX2010, referred to as “BatesDec2d”), a renowned expert, best-selling author, and educator in the field of telecommunications technology. EX2011.

For these and other reasons set forth below, KPN respectfully submits that the Challenged Claims should be confirmed as patentable.

II. THE ’772 PATENT

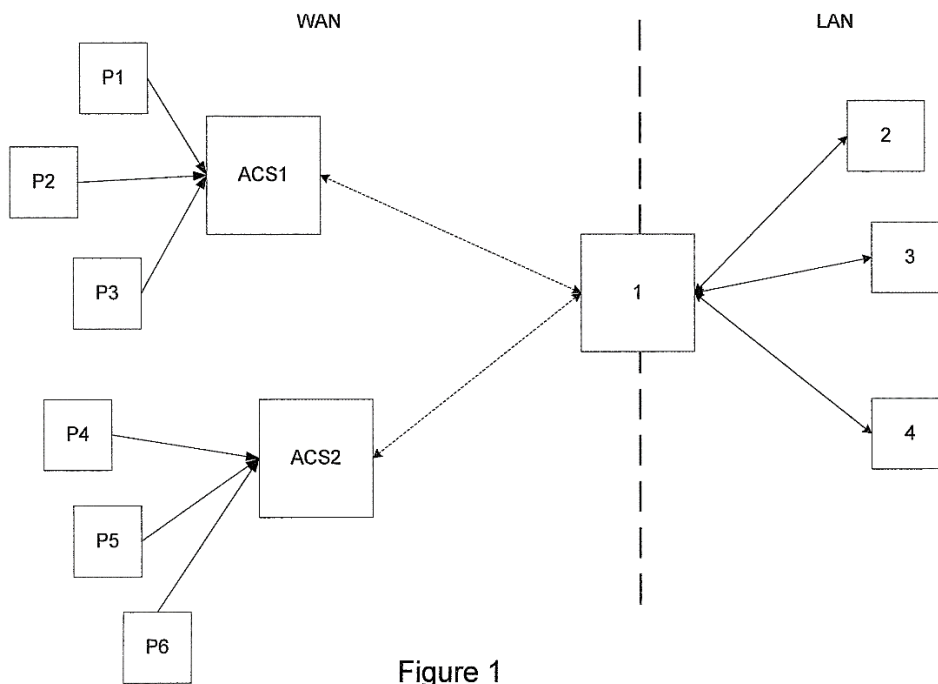
The ’772 Patent describes a system and method for remote device management. According to the ’772 Patent, many of these devices may be remotely managed over such networks by a dedicated auto-configuration server (ACS). EX1001, 1:34-45. This management may relate “to auto-configuration and dynamic service provisioning, software management, status and performance monitoring and diagnostics.” *Id.* 1:35-37.

A. The ’772 Patent’s Discussion of the Prior Art

The ’772 Patent states that “typically” each manageable electronic device was pre-configured with a specific address or uniform resource locator (“URL”) of its dedicated ACS. *Id.* 1:46-60. Manageable electronic devices were assigned to dedicated ACSs based on the characteristics or uses of the device, such as “a certain level of services (e.g. premium, best effort),” “type of device (e.g. Home Gateway, Voice over IP telephone, or Set TopBox),” or “a specific customer group (e.g.

business or residential).” *Id.* 1:46-49.

Figure 1 of the '772 Patent, reproduced below, shows an example of such an arrangement found in the prior art. *Id.* 3:46-47.



In Figure 1, a manageable electronic device 1 connects a local area network (LAN) to a wide area network (WAN). *Id.* 3:64-67. The LAN communicatively couples devices 2, 3, and 4 (which may also be manageable electronic devices) with manageable electronic device 1. *Id.* 3:67-4:4.

The WAN communicatively couples auto-configuration server 1 (ACS1) and auto-configuration server 2 (ACS2) to manageable electronic device 1. *Id.* 4:22-29, 4:35-39. ACS1 and ACS2 contain configuration data for manageable electronic device 1 and manageable electronic device 2, respectively. *Id.* 4:22-29. This auto-

configuration data may have been delivered to ACS1 and ACS2 by one or more of provisioning systems P1, P2, P3, P4, P5, and P6. *Id.* 4:30-32.

A manageable electronic device (such as manageable electronic devices 1 and 2) may require configuration data from its dedicated auto-configuration server (ACS 1 in the case of manageable electronic device 1 and ACS 2 in the case of manageable electronic device 2). *Id.* 4:22-29, 4:40-43. In order to communicate with the appropriate ACS, in this example, the manageable electronic device is pre-configured, prior to installation in the LAN, with the IP address or URL of the proper ACS. *Id.* 4:48-50, 4:55-57.

The pre-configuring of IP addresses or URLs of ACSs, however, is time consuming and sensitive to errors and mistakes. *Id.* 1:53-60. Given the large number of manageable electronic devices on various networks and the time required for pre-configuring, the errors and mistakes that result therefrom are multiplied accordingly. *See id.*

B. The '772 Patent's Advantages Over the Prior Art

In order to overcome at least these shortcomings, the '772 Patent discloses embodiments for remote device management that include an auto-configuration server managing device (ACSMD) communicatively coupled with at least one database and a plurality of ACSs by a network. *Id.* Abstract. According to the '772 Patent, this arrangement improves over the prior art by eliminating at least some of

the problems related to pre-configuring manageable electronic devices. *Id.* 1:64-65.

For example, in one embodiment, instead of pre-configuring a manageable electronic device with an IP address or URL of an ACS, the manageable electronic device can be configured with the IP address of the ACSMD instead. *Id.* 5:51-55.

Figure 2 of the '772 Patent, reproduced below, shows an example of such an arrangement. *Id.* 4:62-63.

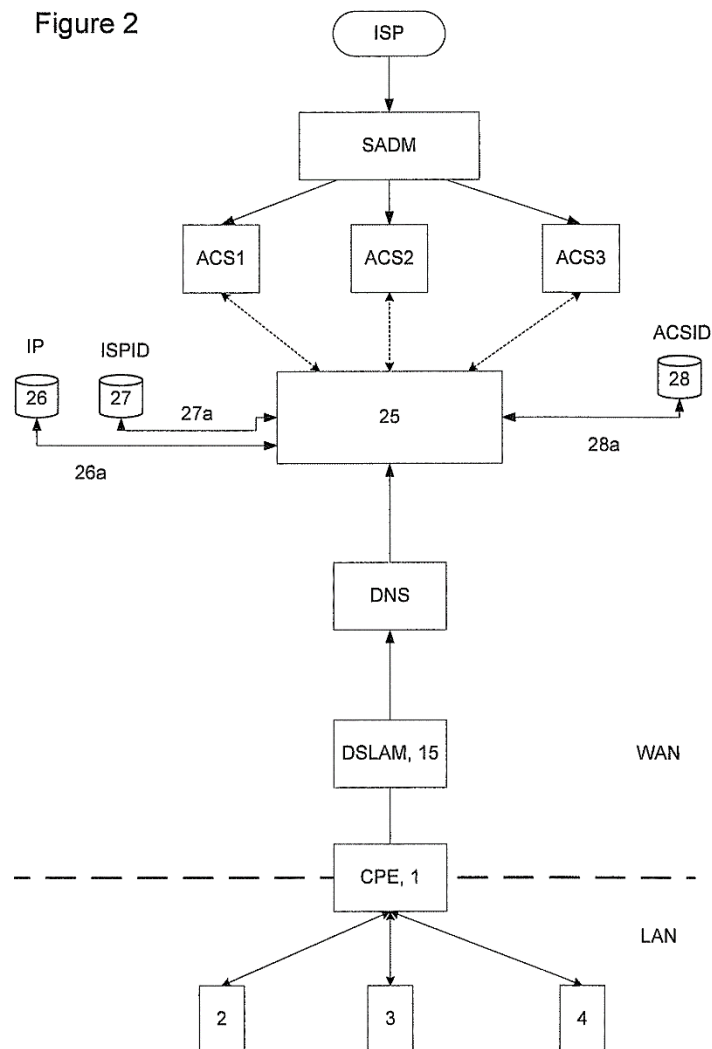


Figure 2 uses the same reference numerals as Figure 1 to refer to corresponding entities. *Id.* 4:64-65. But Figure 2 also includes, in the WAN, a digital subscriber line access multiplexer (DSLAM) 15, a domain name system (DNS) server, an auto-configuration server managing device (ACSMD) 25, and databases 26, 27, and 28. *Id.* 4:66-5:3. Further, a service activation device manager (SADM) may provide an Internet service provider (ISP) and/or other entities access to the ACSs. *Id.* 5:22-26.

In embodiments of the '772 Patent, an ACS can be selected for auto-configuration based on identifying information of manageable electronic device 1, e.g., an IP address of manageable electronic device 1. *Id.* 6:29-43. In this manner, ACSMD 25 can select an ACS that meets the configuration needs of manageable electronic device 1. *Id.* 6:52-55. Doing so dramatically reduces complexity and errors by allowing multiple manageable electronic devices to be pre-configured with the same ACSMD address. *See id.; compare id.* 1:53-60.

1. The ACSMD selects an ACS in response to a request from the manageable electronic device

In an embodiment, manageable electronic device 1 may include a pre-configured IP address or URL for ACSMD 25. *Id.* 5:51-55. Accordingly, in this arrangement, manageable electronic device 1 transmits a request for configuration data to ACSMD 25. *Id.* 5:56-59; *see also* Fig. 5 (M1). Such a request may include identifying information of manageable electronic device 1, such as an IP address of

manageable electronic device 1. *Id.* 6:5-6. Further, the request may include identification of the type of manageable electronic device. *Id.* 9:37-40.

After receiving the request, ACSMD 25 compares identifying information of the manageable electronic device 1 to a database (e.g., database 26). For example, the database may contain IP addresses that are valid for access to ACSMD 25. *Id.* 6:10-15. In such an embodiment, if the IP address of manageable electronic device 1 matches one of the IP addresses in the database, the auto-configuration process continues; otherwise it terminates. *Id.* 6:19-24.

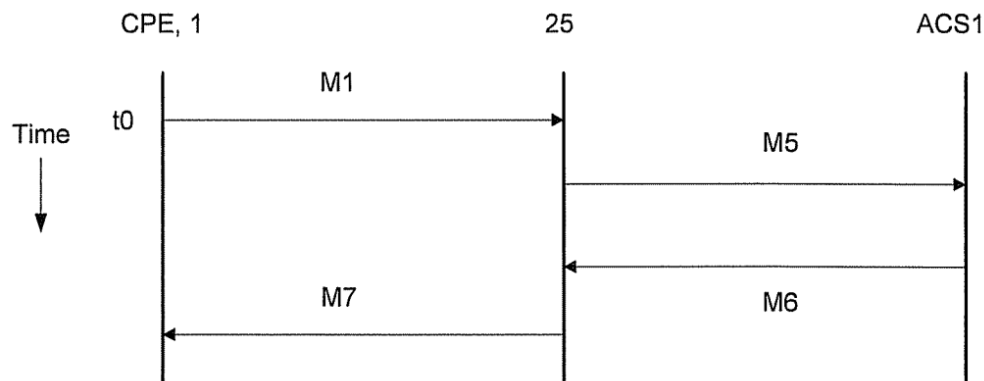
Next, ACSMD 25 may determine the appropriate ACS based on identifying information of manageable electronic device 1. *Id.* 6:29-43. ACSMD 25 can do so by way of a lookup in one or more other databases (e.g., databases 27 and/or 28). *Id.*

2. The ACSMD functions as an intermediate in the system

In some embodiments, ACSMD 25 “functions as an intermediate” between manageable electronic device 1 and the selected ACS. *Id.* 6:65-66, 8:9. For example, ACSMD 25 can relay the request to the selected ACS, receive a reply from the selected ACS containing configuration data for manageable electronic device 1, and relay the reply to manageable electronic device 1. *Id.* 6:63-7:3. Manageable electronic device 1 may use the configuration data to configure itself. *Id.* 8:33-37.

Figure 5 of the '772 Patent, reproduced below, shows an example signal flow between manageable electronic device 1, ACSMD 25, and the selected ACS. *Id.* 3:54-55.

Figure 5



In Figure 5, manageable electronic device 1 is represented by line CPE, ACSMD 25 is represented by line 25, and the selected ACS is represented by line ACS1. *Id.* 7:53-57.

In an embodiment, ACSMD 25 relays a first relayed message M5 to the selected ACS, the selected ACS receives the first relayed message M5 and transmits a reply M6 to ACSMD 25, and the ACSMD 25 receives the reply M6 and relays the reply M6 to manageable electronic device 1 as a second relayed message M7. *Id.* 8:8-31. As set forth by KPN during prosecution of the application that issued as the '772 Patent, “relaying” is a different form of sending a message than merely “forwarding.” EX1004, 85-86; *id.* at 23, 38-42.

C. The Challenged Claims

1. Claims 2, 11, 14, and 16

Claim 2 depends from disclaimed Claim 1, and therefore Claim 2 includes the limitations of disclaimed Claim 1. Claim 2 (rewritten in independent form) recites:

2. 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 ACSMD 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,

wherein the ACSMD is further configured to receive a reply from the identified ACS, and relay the reply to the manageable electronic device.

Claims 11, 14, and 16, which depended from disclaimed Claims 10, 12, and 15, respectively, recite virtually identical claim elements as Claim 2. The Petition does not distinguish between Claim 2 and Claims 11, 14, and 16. Instead, the Petition refers to Claim 2 for its arguments against Claims 11, 14, and 16. Pet., 52, 54, 55, (each stating see “claim 2”).

2. Claims 3-6

Claim 3 depended from disclaimed Claim 1, and therefore Claim 3 includes the limitations of disclaimed Claim 1. Claim 3 (rewritten in independent form) recites:

3. 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,

wherein the ACSMD is further configured to identify the type of the 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.

Claims 4-6 depend from Claim 3.

III. THE ALLEGED PRIOR ART

The Petition presents three proposed grounds of unpatentability against the Challenged Claims. Ground 1 alleges the Challenged Claims are unpatentable as being anticipated by Angelot (U.S. Patent Publication No. 2009/0201830) (EX1006). Ground 2 alleges obviousness of the Challenged Claims in view of Angelot and the knowledge of a POSITA. And Ground 3 alleges obviousness of the Challenged Claims in view of Angelot and Zakurdaev (U.S. Patent Publication No. 2002/0073182) (EX1007).

A. Angelot

Angelot discloses a “system for configuring a plurality of network entities . . . each of the network entities being associated with at least one service provider having configuration settings data therefor.” EX1006, Abstract. Angelot describes “[s]everal preferred embodiments.” *Id.* ¶[0034].

Figure 1 of Angelot, reproduced below, illustrates “a preferred embodiment” of the system. *Id.* ¶[0035].

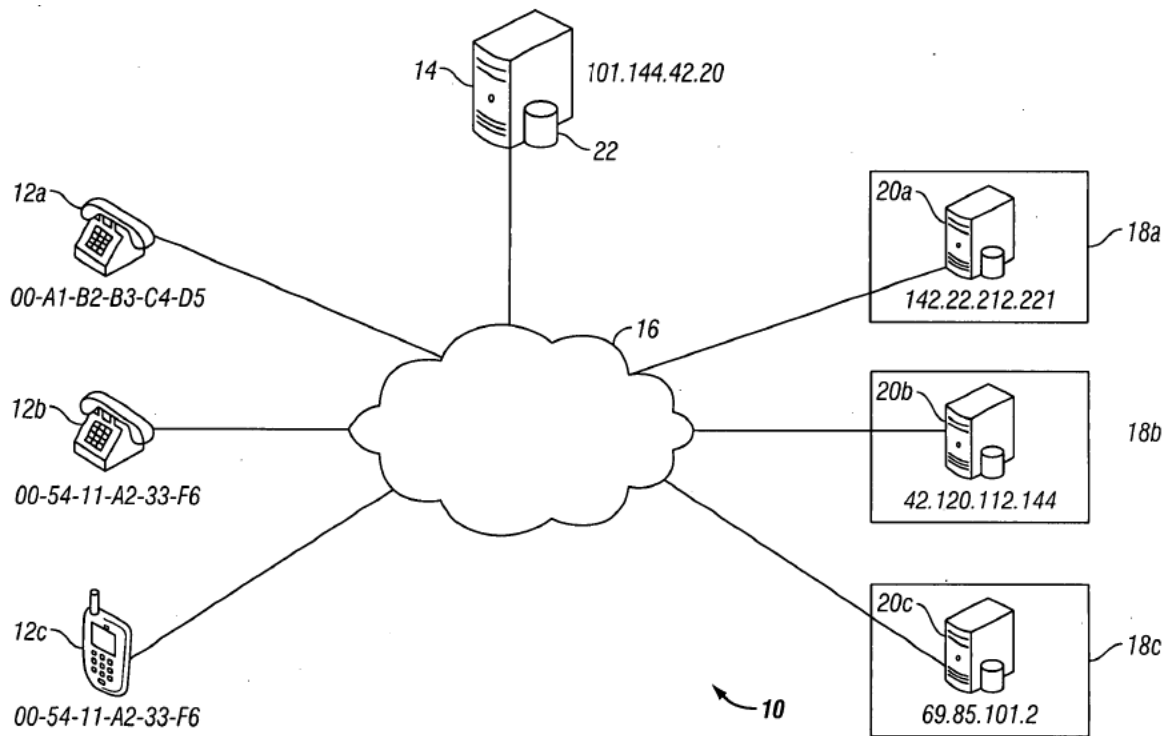


FIG. 1

In the embodiment of Angelot shown in Figures 1 and 2 and discussed in ¶¶[0043]-[0054], a configuration server 20a, 20b, or 20c, which Petitioner maps to an “ACS” in the Challenged Claims (Pet., 45), “forwards the relevant configuration settings data to the IP phone 12a.” EX1006, ¶[0054].

Angelot discloses several other embodiments at ¶¶[0055]-[0063], each reciting “[i]n another exemplary embodiment” or “[i]n yet another exemplary embodiment.” BatesDec2d, ¶¶112-113. Petitioner cites one of those embodiments (Pet., 32-33) for the server 14 acting 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.” EX1006, ¶[0062] (emphasis added). That embodiment is silent, however, as to why the server 14 would make such a request and, if not actually made “directly” from the server, where such a request would have come from. BatesDec2d, ¶¶113-115.

Angelot does not refer or disclose the required “relay” action. BatesDec2d, ¶¶116, 137. In fact, in a child of the ’772 Patent, now U.S. Patent No. 9,838,256 (“the Child ’256 Patent”), a USPTO Examiner found that Angelot does not disclose “the auto-configuration server manager further being arranged for . . . relaying the request to the identified auto-configuration server.” EX1019, 42; BatesDec2d, ¶¶120-122 (agreeing with the Examiner’s finding).

B. Zakurdaev

Petitioner combines Angelot with Zakurdaev in Ground 3. Pet., 67; EX1007. Zakurdaev discloses what it calls a “Relay server,” which simply forwards IP address requests to ISPs: “A Smart DHCP Relay server is formed for receiving all IP address requests, to determine the ISP to which the request should be forwarded, and then to forward the request to the ISP.” EX1007, Abstract; *see also id.* ¶[0012].

Zakurdaev does not disclose the operation of “relaying” a request or a reply, however, as that term is disclosed in the ’772 Patent. BatesDec2d, ¶124.

IV. LEVEL OF ORDINARY SKILL IN THE ART

For purposes of this IPR, KPN does not challenge the qualifications proposed

by Petitioner for a person of ordinary skill in the art (“POSITA”). Pet., 16; *see also Samsung Elecs. Co.*, IPR2016-00808, Paper 5, 21 (similar); *Xiaomi*, IPR2022-00025, Paper 5, 20 (same); BatesDec2d, ¶¶53-57.

V. CLAIM CONSTRUCTION

A. Prior Board and District Court Claim Constructions

The Board construed claim terms of the ’772 Patent when denying Samsung’s petition. *Samsung Elecs. Co.*, IPR2016-00808, Paper 6, at 8-12. The U.S. District Court for the Eastern District of Texas also construed claim terms of the ’772 Patent in prior litigation involving Samsung. *Koninklijke KPN N.V. v. Samsung Elecs. Co.*, 14-cv-01165-JRG (E.D. Tex. May 6, 2016) (EX1005) (“the *Samsung* Litigation”). Further, after the Board’s Institution Decision, the Eastern District of Texas construed claim terms of the ’772 Patent in parallel litigation between KPN and Petitioner. *Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson et al.*, 2:22-CV-00282-JRG, Dkt. Nos. 176, 195 (E.D. Tex.) (EX2012, EX2013) (“the *Ericsson* Litigation”).

KPN’s expert agrees with the District Court’s constructions in the *Samsung* Litigation and *Ericsson* Litigation, BatesDec2d, ¶¶82-93, and KPN requests that the Board adopt them for the purposes of the Trial. 37 C.F.R. § 42.100(b).

The District Court in the *Samsung* Litigation adopted KPN’s construction of “relay” from prosecution of the ’772 Patent, which differentiated “relay” from

“forward” and found “relay” means “change, process, or otherwise manage a request based at least in part on its payload.” EX1005, 60-61. Further, the District Court in the *Ericsson* Litigation construed “relay” to mean “change, process, or otherwise manage a request based at least in part on its payload, and forward.” EX2012, 46. The District Court’s construction of “relay” in the *Ericsson* Litigation is similar to the District Court’s construction of “relay” in the *Samsung* Litigation, and both constructions confirm that “relay” is different from “forward” and “send.” BatesDec2d, ¶91.

Although Petitioner accurately sets forth the constructions from the *Samsung* Litigation in a table on pages 13-15 of the Petition, Petitioner makes an additional, incorrect allegation that KPN’s “current understanding” is that “relay” means “send” or “pass.” Pet., 16. That is not the case. Indeed, since Petitioner filed the Petition, the District Court in the *Ericsson* Litigation rejected Petitioner’s construction of “relay” as “send,” and adopted KPN’s argument. EX2012, 42-46. Following briefing and oral argument in that proceeding, the District Court found that “[Petitioner’s] reliance on extrinsic evidence as well as a general suggestion of overbreadth . . . does not warrant departing from the Court’s prior construction.” *Id.* at 46.

Petitioner presents the same extrinsic evidence in the Petition that the District Court in the *Ericsson* Litigation already rejected, namely, a footnote in a joint claim

construction brief from another litigation that was dismissed before the court conducted a *Markman* hearing or construed any claims. *Compare* Pet. 3, 11, 15, 57 (citing EX1009, 52 n.10), *with* EX2012, 45. For the reasons in the District Court’s claim construction orders in the *Ericsson* Litigation and the *Samsung* Litigation, KPN submits that “relay” recited in the Challenged Claims is different from “forward” and “send.” EX2012, 44-46; EX1005, 60-61.

B. Other Terms

KPN submits that each other claim term recited in the Challenged Claims that has not been previously construed by the Board or the District Court can be given its plain and ordinary meaning, and that no express constructions of these terms are needed. *Compare* Pet., 15-16.

VI. CLAIMS 3-6 ARE PATENTABLE

A. Ground 1: Angelot does not disclose “wherein the ACSMD is further configured to identify the type of the 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” recited in Claim 3

Petitioner claims that Angelot anticipates Claim 3 by alleging that the MAC address used in Angelot is a “network address,” and that because in Angelot the MAC address can identify the manufacturer of the network entity, Angelot somehow discloses that the ACSMD is configured to identify the type of the manageable electronic device. Pet., 46-48. Petitioner is incorrect on both points.

1. Angelot does not disclose “the ACSMD is further configured to identify the type of manageable electronic device”

In the Institution Decision, the Board agreed with KPN that Angelot does not disclose Claim 3. ID, 25 (citing Paper 5 (“Prelim. Resp.”) 51-52; EX2001, ¶148). The Board found that “Petitioner does not explain specifically how identifying the manufacturer of a network entity discloses identifying the type of network entity,” and “the ’772 patent appears to indicate that the manufacturer of a device is different than the type of device.” ID, 25 (citing EX1001, 7:21-26). KPN agrees with these findings. BatesDec2d, ¶¶132-135.

Pursuant to the Board’s guidance: KPN “raise[s] its arguments regarding claim 3 again” in this Response. ID, 25. Although Angelot discusses that a MAC address can be used to identify the manufacturer of a network device or a “class of device” of that network device, Pet. 46-48, Angelot nowhere discloses that the MAC address can be used to identify the “type” of network device. BatesDec2d, ¶130. There is a reason: identifying a manufacturer of a device is not identifying a type of device, and Angelot clarifies that “class of device” refers only to whether certain devices are for personal use or work (i.e., “enterprise” devices or “consumer devices”). EX1006, ¶[0059]; BatesDec2d, ¶131. Petitioner’s expert, Dr. Blumenthal, confirms this point. EX1002, ¶140. He opines only that Angelot discloses “class of device 12 (whether

the manageable electronic device is from manufacturer A or C” *Id.*; BatesDec2d, ¶131.

2. Angelot does not disclose the “network address”

The ’772 Patent identifies an IP address as an example of a network address. EX1001, 4:14-19; FIG. 3b. This is consistent with well-known network architecture models, in which a network layer (e.g., characterized by IP addressable devices) is distinct from a link layer (e.g., a medium access layer with devices identified according to MAC addresses). BatesDec2d, ¶126.

Petitioner’s expert claims that the “USPTO appears to agree” that Angelot discloses “network address” and cites an Office Action in the Child ’056 Patent. EX1002, ¶[0137]. But KPN overcame the Examiner’s rejections under Angelot and the Child ’256 Patent issued. EX1019, 1, 42. KPN, however, did not specifically address the merits of the Examiner’s rationale regarding “network address.” EX1019, 28-30.

In any case, a POSITA would have known that the MAC address in Angelot is at most a link layer identifier unique to a device. BatesDec2d, ¶128. Angelot itself confirms that a MAC address identifies and is specific to hardware, such as an IP phone 12, and is not a network address. EX1006, ¶[0049]; BatesDec2d, ¶128.

The MAC address as used in Angelot is not a network address. BatesDec2d, ¶¶127-128. Petitioner’s expert provides no support for Petitioner’s position, other

than citing various paragraphs of Angelot that simply refer to a device's MAC address. EX1002, ¶¶[0137]-[0140]; BatesDec2d, ¶129.

B. Ground 2: Angelot does not render obvious Claim 3

Petitioner's Ground 2 asserts that it would have been obvious to modify Angelot to achieve "relay," and does not cure the deficiencies of Angelot as to the limitation of Claim 3. Pet., 55-67; BatesDec2d, ¶226. Petitioner did not argue that Angelot would have rendered obvious this limitation. Pet., 55-67; BatesDec2d, ¶227.

C. Ground 3: Angelot and Zakuradev do not render obvious Claim 3

Petitioner's Ground 3 asserts that it would have been obvious to combine Angelot and Zakurdaev to achieve "relay," and does not cure the deficiencies of Angelot as to the limitation of Claim 3. Pet., 67-72; BatesDec2d, ¶245. Petitioner did not argue that Zakurdaev teaches this limitation. Pet., 67-72; BatesDec2d, ¶246.

D. Claims 4-6 are patentable

Claims 4-6 depend from Claim 3, and therefore these claims are patentable over Angelot and Zakurdaev for at least the same reasons that Claim 3 is patentable. ID, 25.

VII. CLAIMS 2, 11, 14, AND 16 ARE PATENTABLE

A. Ground 1: Angelot does not disclose "relay"

Claim 2 recites "the ACSMD is further configured to relay the request to the identified ACS" in [1h], and also recites "the ACSMD is further configured to receive

a reply from the identified ACS, and relay the reply to the manageable electronic device.” Both limitations require that the ACSMD “relay” a request or reply. Angelot never discloses sending a message via relaying. BatesDec2d, ¶¶136-137. At most, Angelot discloses that a central server may “redirect” or “forward” configuration settings. *Id.*⁴

1. Angelot never once refers to or discloses “relay”

Angelot uses the terms “redirect” and “forward” interchangeably. BatesDec2d, IX.b & ¶¶140-141. For example, in the embodiment disclosed in Figures 1-2 and ¶¶[0043]-[0054], Angelot states “the central server 14 forwards the query” and “the central server 14 redirects any configuration related queries” in the same paragraph. EX1006, ¶[0047]. And as another example, in the embodiment disclosed in ¶[0062], Angelot states “the redirect server 14 serves as a proxy or intermediary, by communicating . . . and then forwarding.” *Id.* ¶[0062].

This is not the same as “relay,” however. BatesDec2d, ¶¶140-141. As set forth by KPN during prosecution of the application that issued as the ’772 Patent, “relaying” is a different form of sending a request than merely “forwarding” EX1004, 85-86; *id.* at 23, 38-42; BatesDec2d, ¶¶71-76. The two District Courts’ constructions of “relay” confirm that “relay” is different from

⁴ Angelot’s lack of [1h] is an additional reason that Claim 3 is patentable.

“forward” and “send.” EX2012, 44-46; EX1005, 60-61; BatesDec2d, ¶¶138-139.

Accordingly, Petitioner’s allegations that Angelot’s discussions of “forwarding” or “redirecting” are the same as “relaying” are completely unsupported. BatesDec2d, ¶140. For example, Petitioner accurately quotes Angelot’s use of “redirect,” “redirected,” “redirects,” and “forwarded” on pages 39-42 of the Petition. Petitioner then, however, improperly ignores the meaning of the term “relay” and merely replaces the inconvenient terms “redirect” and “forward” with “relay” when characterizing Angelot. Pet., 38-39, 40, 42; BatesDec2d, ¶¶140-141.

2. Angelot’s use of “processes” in ¶[0054] does not support Petitioner

i. ¶[0054] does not disclose “relay”

Petitioner claims that Angelot ¶[0054] discloses “relay” as understood by the Eastern District of Texas based on that paragraph’s use of the term “processes.” Pet., 40-41. But the two District Courts’ constructions of “relay” involve more than “process”—requiring “process . . . a request based at least in part on its payload.” EX2012, 44-46; EX1005, 60-61. ¶[0054] never refers to or discloses a “payload” or processing based on payload and merely describes “forwarding” based on the MAC address of a device being found in a mapping table “maintained in a memory associated with the central server 14” (EX1006, ¶[0051]):

In step 112, the central server 14 receives a request for configuration settings from the IP phone 12a. The request includes the identity data of the IP phone 12a, such as the unique MAC address. Upon 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. Once such a determination has been established, the central server 14 then *redirects* the request to an appropriate service provider 18a, 18b or 18c, as per first mapping table (step 114).

EX1006, ¶[0054] (emphasis added); BatesDec2d, ¶143.

In the Institution Decision, the Board found that “Angelot discloses that the central server ‘processes’ the request based on the MAC address ‘include[d]’ in the payload of the request.” ID, 21 (citing EX1006, ¶[0054]) (alteration in the original)). But on a full record, this finding is incorrect. BatesDec2d, ¶¶144-146.

First, Petitioner did not offer the Board’s interpretation of Angelot in the Petition: “the MAC address ‘include[d]’ in the payload of the request.” *Compare* ID, 21, *with* Pet., 44, 59; BatesDec2d, ¶145. Thus, this interpretation is not presented by Petitioner in the IPR. *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1381 (Fed. Cir. 2016). Further, Angelot’s statement that “[t]he request includes the identity data of the IP phone 12a, such as the unique MAC address,” EX1006, ¶[0054], is not

a disclosure that the MAC address is in the payload of the request. BatesDec2d, ¶146. Again, Angelot never refers to or discloses “payload.” *Id.* at ¶¶143, 146.

ii. ¶[0054] cannot disclose both [1g] and [1h]

Petitioner mapped Angelot’s disclosure of “the central server 14 processes the request” in ¶[0054] to both “the ACSMD is configured, responsive to receiving the request, to: identify the manageable electronic device by comparing at least a portion of the request” recited in part of [1g], and “the ACSMD is further configured to relay the request to the identified ACS” recited in [1h]. Pet. 34-36, 38-42. The Institution Decision confirms that Petitioner relies on the same processing in Angelot as disclosing these two different limitations. ID, 20 ([1g] and [1h]).

Angelot’s description of “the central server 14 processes the request” cannot meet both [1g] and [1h]. *Ex parte Vembu*, 2020-005681, 2021 WL 5756111, *4 (PTAB Dec. 2, 2021) (“It is well-established law that a single element in the prior art cannot serve as two different claim limitations.”); BatesDec2d, ¶148. First, [1g] and [1h] are different limitations and are recited separately. *Becton, Dickinson & Co. v. Tyco Healthcare Group, LP*, 616 F.3d 1249, 1254 (Fed. Cir. 2010); BatesDec2d, ¶148.

Second, the specification of the ’772 Patent confirms that the ACSMD (i) identifying the manageable electronic device and the ACS and (ii) relaying the request are separate and different. BatesDec2d, ¶¶149-153. For example, Figures

3b and 5 of the '772 Patent teach that identifying the manageable electronic device and the ACS is distinct from relaying the request. BatesDec2d, ¶¶149-151.

Figure 3b

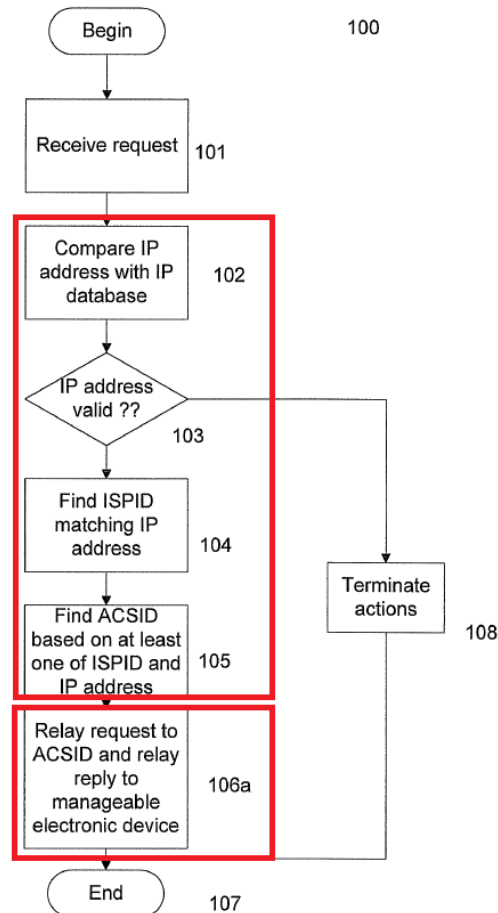


Figure 3b of the '772 Patent, reproduced above (annotations added to 102-105 and 106a), shows an example flow diagram of an “alternative embodiment” of method 100 (where “alternative” is with respect to a different embodiment illustrated in Figure 3a). EX1001, 6:63. In actions 102-105, ACSMD 25 (i) compares the received IP address of manageable electronic device 1 with a first database 26, and (ii) resolves an IP address ACSID of the selected ACS. *Id.* 6:10-24, 29-51. Then,

after actions 102-105, in action 106a, ACSMD 25 relays the request from manageable electronic device 1 to the selected ACS, and relays the reply from selected ACS to manageable electronic device 1. *Id.* 6:63-7:3.

Figure 5

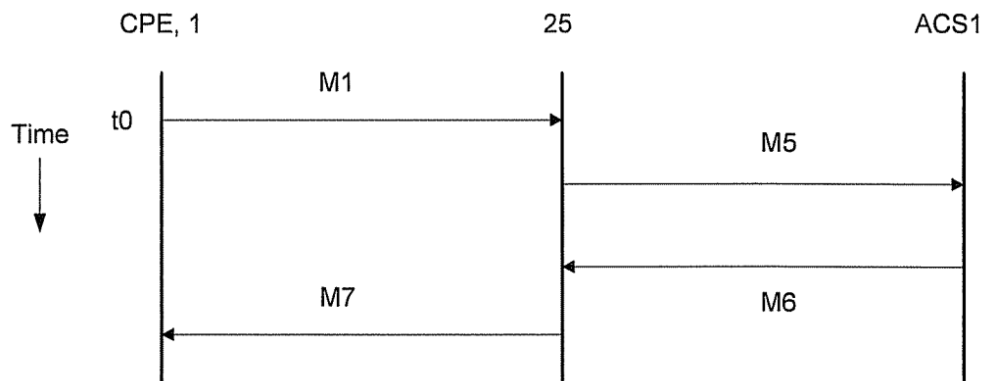


Figure 5 of the '772 Patent, reproduced again above, shows an example signal flow between in manageable electronic device 1, ACSMD 25, and selected ACS in which ACSMD 25 relays first relayed message M5 to the selected ACS, and the ACSMD 25 relays the reply M6 to manageable electronic device 1 as a second relayed message M7. *Supra* p.13.

The '772 Patent teaches that actions 102-105 related to identifying the manageable electronic device and the ACS are separate and distinct from action 106a related to relaying the request. BatesDec2d, ¶152. Accordingly, the '772 Patent teaches that processing that occurs in actions 102-105 related to identifying the

manageable electronic device and the ACS is separate and distinct from processing that occurs in action 106b related to relaying the request. BatesDec2d, ¶153.

Thus, if Angelot’s teaching of “the central server 14 processes the request” in ¶[0054] is mapped to [1g], it cannot also be mapped to processing in [1h] consistent with the two District Courts’ constructions of “relay”: “change, *process*, or otherwise manage a request based at least in part on its payload.” EX2012, 46; EX1005, 60-61 (emphasis added in both); BatesDec2d, ¶155. There is no other teaching of processing in Angelot that could be mapped to [1h]. *Id.* Angelot’s sole teaching of “processes the request,” found only in ¶[0054], cannot be mapped to distinct processing in two different limitations of Claim 2. *Id.* ¶¶154-155.

3. Angelot does not disclose “wherein the ACSMD is further configured to receive a reply from the identified ACS, and relay the reply to the manageable electronic device” recited in Claim 2

With respect to the limitations in the Challenged Claims found in Claim 1, Petitioner’s anticipation argument relies on the embodiment disclosed in ¶¶[0043]-[0054] of Angelot. Pet., 20-42 ([1pre]-[1h]). For Claim 2, however, Petitioner does not appear to allege this disclosure in the embodiment of ¶¶[0043]-[0054] alone, but instead relies on a different embodiment disclosed in ¶[0062] to fill in the gaps for what Angelot fails to teach in any single, disclosed embodiment. BatesDec2d, ¶156.

Petitioner’s attempts to combine multiple embodiments of Angelot, i.e., the embodiment of ¶¶[0043]-[0054] with the embodiment of ¶[0062], to arrive at Claim

2 violates *Net MoneyIN v. Verisign*, 545 F.3d 1359, 1371 (Fed. Cir. 2008), and related cases that hold that, for anticipation, “it is not enough that the prior art reference discloses . . . distinct teachings that the artisan might somehow combine to achieve the claimed invention.” Further, the Petition did not present any argument or evidence that a POSITA “at once envisage” the proposed combination of Angelot embodiments. *Chamberlain Grp., Inc. v. Techtronic Indus. Co.*, 935 F.3d 1341, 1350 (Fed. Cir. 2019) (quotation omitted)

But Petitioner’s reliance on the ¶¶[0043]-[0054] embodiment rests on an erroneous analysis of Angelot’s disclosure, particularly ¶[0052]. BatesDec2d, ¶157. As such, even allowing, *arguendo*, for combining disparate embodiments of Angelot, Angelot still fails to anticipate Claim 2. *Id.*

i. ¶[0052] of Angelot does not disclose forwarding anything to an IP phone based on MAC address

In its reliance on Angelot ¶[0062], Petitioner alleges:

[T]he server 14 (ACSMD) serves as an “intermediary” and communicates “with one of the configuration servers 20a... to directly request and *acquire* the configuration settings data, and then *forwarding* the configuration setting data to the network entity 12a.” (Ex. 1006, ¶62.)

Pet., 43 (some emphasis in original removed).

Petitioner then cites both the ¶¶[0043]-[0054] embodiment and the ¶[0062] embodiment in the same citation, alleging:

Specifically, the configuration setting data (reply) from the identified configuration server 20a is (1) acquired by the server 14 from the configuration server 20a and then (2) “***provided to the IP phone 12a based on the MAC address.***” (*Id.* ¶¶52, 62. (emphasis added).)

Pet., 44. Petitioner’s citation of ¶[0062] appears to apply to Petitioner’s point (1), because the embodiment of ¶¶[0043]-[0054] fails to disclose anything about the server 14 receiving or acquiring configuration settings from a configuration server or forwarding configuration settings to an IP phone. BatesDec2d, ¶159.

Further, Petitioner’s citation of ¶[0052] appears to apply to Petitioner’s point (2), somehow transforming the “forwarding the configuration setting data to the network entity 12a” of paragraph [0062] into ***the server 14*** providing the configuration setting data “to the IP phone 12a based on the MAC address.” EX1006, ¶[0052] (emphasis added); BatesDec2d, ¶160. But ¶[0052] in Angelot does not disclose the server 14 doing anything with configuration setting data based on MAC address of the IP phone, even allowing, *arguendo*, for Petitioner’s reliance on the ¶[0062] embodiment in which the server 14 acquires the configuration setting data from a configuration server. *Id.*

In ¶[0052], Angelot discloses “[t]he configuration servers 20a, 20b, 20c are coupled to the central server 14a, such that queries for configuration settings may be redirected thereto based on the ***first*** mapping table.” EX1006, ¶[0052] (emphasis added). As described in ¶[0052] (and elsewhere in Angelot), the first mapping table

serves only for forwarding a device's "request" received at the central server 14 *from* the central server 14 *to* one or more configuration servers 20a, 20b, 20c, based on the MAC address of the device that issued the "request." BatesDec2d, ¶161. Angelot does not disclose that the first mapping table provides any information that could be used by the central server 14 to forward "configuration data" received at the central server 14 (e.g., acquired from a configuration server 20a, 20b, or 20c, as Petitioner relied on ¶[0062] as teaching) to IP phone 12a to which the configuration data applies—not based on the MAC address or any other disclosed step. EX1006, ¶¶ [0052], [0054]; BatesDec2d, ¶161. The first mapping table provides only a *one-way mapping*. BatesDec2d, ¶161.

Further, Angelot ¶[0052] does not disclose anything about the configuration server 20a, 20b, or 20c sending the configuration settings to either the IP phone 12a associated with the MAC address or the central server 14. BatesDec2d, ¶162. This may explain why Petitioner relied on Angelot ¶[0062] for Ground 1. *Id.*

Rather, ¶[0052] discloses that a configuration server has a "*second* mapping table" (FIG. 3b) that associates a MAC address with configuration settings for the device associated with the MAC address:

The configuration server 20a, 20b or 20c includes configuration settings specific to the IP phone 12a with specific MAC addresses. Each service provider 18a, 18b or 18c thus includes *a second mapping table*

with MAC addresses and associated configuration settings data in a database associated with each of the configuration servers 20a, 20b or 20c.

EX1006, ¶[0052] (emphasis added); BatesDec2d, ¶163. The configuration server uses the second mapping table as a look-up to determine the appropriate settings. EX1006, ¶[0052]; BatesDec2d, ¶163.

The MAC address in the second mapping table does not provide any information about how to forward anything to an IP phone or any other device. BatesDec2d, ¶164. As Angelot discloses:

The *configuration settings [in the second mapping table]* may include phone specific configuration information, and platform specific configuration information, such as, but not limited to, the type of phone, carrier, service, or enterprise system information, ... *Firmware upgrades/downgrades may also be provided to the IP phone 12 a based on the MAC address.*

EX1006, ¶[0052] (emphasis added). Thus, properly understood in the context of ¶[0052], the phrase “provide to the IP phone 12a based on the MAC address” refers to the *configuration server* determining from the *second* mapping table—based on a MAC address look-up—“[f]irmware upgrades/downgrades” that may be provided (though no step for doing so is disclosed) to the IP phone associated with MAC address. BatesDec2d, ¶164. The phrase does not refer to forwarding—based on MAC address—anything to the IP phone. *Id.*

In any case, the second mapping table is consulted by the configuration server, and not the central server 14. *Id.* ¶165. Thus, notwithstanding the second table providing no information for forwarding, Angelot does not disclose in ¶[0052] that the central server ever accesses or consults the second table. Thus, even if the second mapping table was assumed, *arguendo*, to include MAC-based forwarding information, it is not available to the central server 14 for forwarding anything to the IP phone. *Id.*

Petitioner's erroneous analysis and use of Angelot's ¶[0052] renders Petitioner's point (2) of the allegation on page 44 of the Petition meaningless in connection with Petitioner's unsupported conjecture of how the server 14 may forward configuration data to an IP phone. *Id.* ¶166. What is left is only what ¶[0062] discloses: the "redirect server ... **forwarding** the configuration setting data to the network entity 12a." EX1006, ¶[0052] (emphasis added). This does not anticipate Claim 2. BatesDec2d, ¶166.

ii. Petitioner's combination of different embodiments of Angelot (¶[0062] + other embodiments) is legally improper

Similar to *Net MoneyIN*, Petitioner attempts to rely on "distinct teachings" of Angelot for anticipation. 545 F.3d at 1371. Petitioner's combining of Angelot's embodiments is well-illustrated in its annotated version of Angelot's Figure 1 (Pet., 23-24), reproduced below in three versions modified by KPN, each having

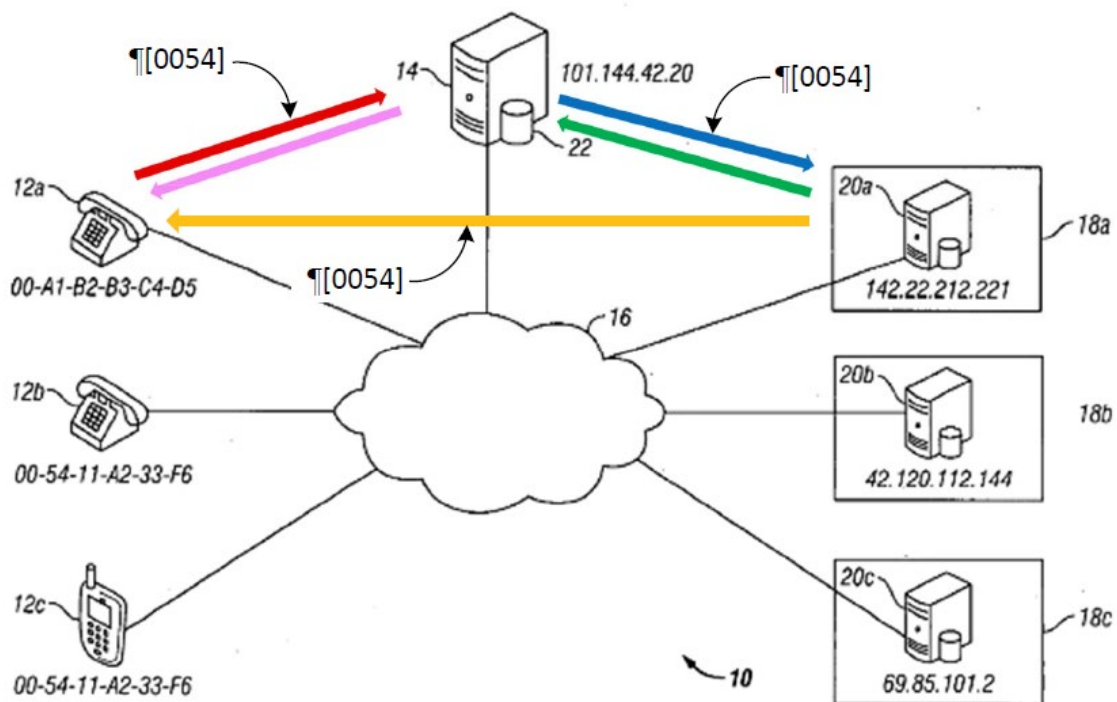
annotations additional to Petitioner's red, blue, green, and pink arrows. KPN's annotations include Angelot paragraph numbers "¶[0054]" and "¶[0062]" to show how each is a distinct embodiment and to show how neither embodiment discloses all of Petitioner's red, blue, green, and pink arrows.

While all of Petitioner's added arrows are retained in each of the three reproductions below, only those arrows with an additional annotation of a paragraph number are relevant to the particular embodiment disclosed in the paragraph. Thus, arrows without paragraph annotations correspond to a *different* embodiment—demonstrating Petitioner's combining of embodiments. Two of three annotated versions below include an additional arrow that corresponds to one or more steps that Petitioner omitted or misrepresented in its annotated version. Also, ¶[0062] actually describes two different embodiments, which, in the present discussion only (and the figures below), are distinguished as "¶[0062]a" and "¶[0062]b." Elsewhere herein, "¶[0062]" corresponds to "¶[0062]a."

The first modified version of Petitioner's annotated Figure 1 corresponds to the ¶[0054] embodiment. In this embodiment, network entity 12a sends a request for configuration data to central server 14 (red arrow), which redirects (forwards) the request to service provider 18a (blue arrow). In a step omitted by Petitioner, configuration data are forwarded from service provider 18a to network entity 12a (yellow-orange arrow). Contrary to Petitioner's green and pink arrows (with no

paragraph annotations), the configuration settings are not forwarded to the network entity via the central server in the ¶[0054] embodiment—they do not correspond to the embodiment in ¶[0054]. BatesDec2d, ¶¶171-172.

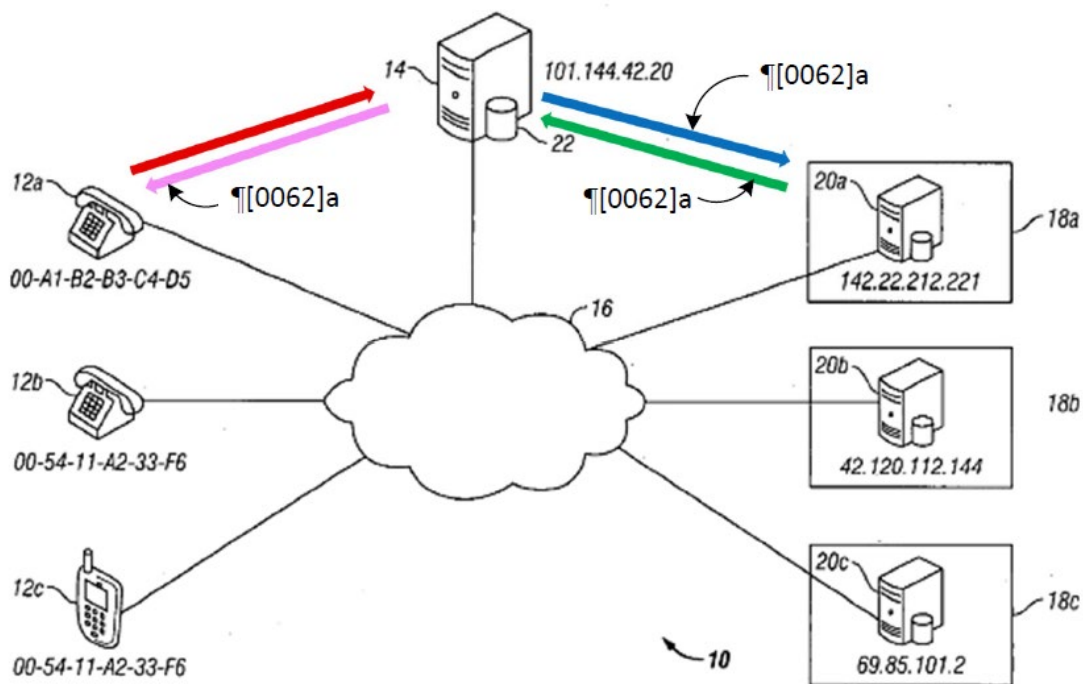
Angelot’s disclosure of the “[f]irmware upgrades/downgrades may also be provided to the IP phone 12a based on the MAC address” in ¶[0052], which is part of the embodiment of ¶¶[0043]-[0054] illustrated below, plays no part in any forwarding action. *Supra* pp.37-38.



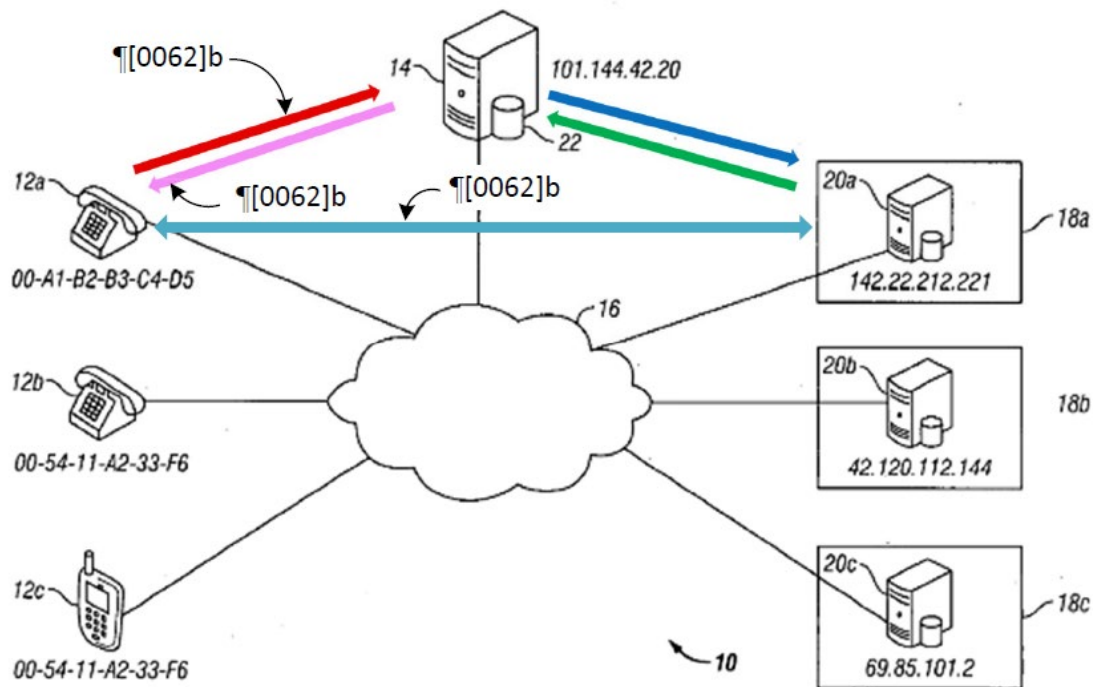
The second modified version of Petitioner’s annotated Figure 1 corresponds to the first embodiment of ¶[0062], labeled “¶[0062]a” here. This embodiment *begins* with the central server 14 “directly” requesting configuration settings from a

configuration server (blue arrow). The central server then acquires the configuration settings (green arrow) and forwards them to the network entity (pink arrow). Contrary to Petitioner's red arrow (with no paragraph annotation), the ¶[0062]a embodiment does not disclose a request for configuration data from the network entity 12a to the central server 14. BatesDec2d, ¶¶173-174.

There is no disclosure in Angelot that MAC address is used by the central server to forward (pink arrow) configuration settings to the network entity. Again, Petitioner's cite to the embodiment of ¶[0052]—which is distinct from the embodiment of ¶[0062]—for a disclosure of MAC-based forwarding is erroneous. *Supra* pp.34-38.



The third modified version of Petitioner's annotated Figure 1 corresponds to the second embodiment of ¶[0062], labeled "¶[0062]b" here. In this embodiment, the network entity 12a contacts the central server 14 with a request for configuration information (red arrow), and the central server 14 responds with a URI of a configuration server (pink arrow). Then—in steps omitted by Petitioner—the network entity contacts the configuration server directly to obtain configuration settings (light-blue arrow). Contrary to Petitioner's blue and green arrows (with no paragraph annotations), the ¶[0062]b embodiment does not disclose any communication between the central server and the service provider / configuration server. And the paragraph-annotated pink arrow merely informs the network entity 12a where to find configuration data; it is not a forwarding of such data from the configuration server. BatesDec2d, ¶¶175-176.



As shown above regarding the ¶[0054] and ¶[0062] embodiments (and other variations omitted herein for the sake of brevity), **none** incorporate all the limitations of Claim 2. BatesDec2d, ¶176. Petitioner, accordingly, is improperly combining parts of separate embodiments of Angelot to form its anticipation argument. *Net MoneyIN*, 545 F.3d at 1371; BatesDec2d, ¶¶156, 167. Even assuming *arguendo* Petitioner’s allegations that parts of Angelot actually do disclose each element of Claim 2, Angelot certainly does not disclose those elements “arranged as in the claim.” *Finisar Corp. v. DirecTV Group, Inc.*, 523 F.3d 1323, 1334 (Fed. Cir. 2008).

In the Institution Decision, the Board found that Angelot ¶[0062] “indicates the central server . . . receives . . . a request from the network entity,” and “describes

an embodiment in which the central server receives a request from a network entity.” ID, 22-23. But on a full record, these findings are incorrect. BatesDec2d, ¶¶177-179.

¶[0062]’s reference to “directly request” does not disclose the central server receiving a request from the network entity. *Id.* ¶178. If the request were not actually made “directly” from the central server, the ¶[0062] embodiment does not disclose where such a request would have come from. *Supra* p.19.

Further, Angelot’s claim 13 does not support the Board’s findings regarding Angelot ¶[0062]. BatesDec2d, ¶179. Angelot’s claim 13 does not mention the central server receiving a request from a network entity. *Id.* Again, this claim’s reference to “directly request” does not disclose the central server receiving a request from the network entity. *Id.* If the request were not actually made “directly” from the central server, claim 13 does not disclose where such a request would have come from. Thus, on a full record, the Board’s finding that Angelot’s claim 13 “recites a system in which the central server acts as an ‘intermediary’ by receiving a request from a network entity,” ID, 22-23, is incorrect. BatesDec2d, ¶179.

In the Institution Decision, the Board found that, in Angelot, “the cited disclosures from paragraph 54 and 62 are not distinct teachings.” ID, 23. But because the Board’s findings that Angelot ¶[0062] “indicates the central server . . . receives . . . a request from the network entity,” and “describes an embodiment in

which the central server receives a request from a network entity,” *id.* at 22-23, are incorrect, on a full record the Board’s finding that Angelot “paragraph 54 and 62 are not distinct teachings,” *id.* at 23, is also incorrect. BatesDec2d, ¶180.

iii. Petitioner’s combination of different embodiments of Angelot is technically improper as the ¶[0062] embodiment cannot work with the other embodiments

Petitioner’s proposed combination of Angelot embodiments also cannot be combined technically. BatesDec2d, ¶181. Accordingly, a POSITA, reading Angelot, would not “‘at once envisage’ the claimed combination,” and Petitioner and its expert failed to present any argument or evidence to the contrary. *Chamberlain*, 935 F.3d 1341 (quotation omitted); BatesDec2d, ¶188.

In contrast to the ¶[0062] embodiment, in every other embodiment of Angelot in which the server 14 forwards or redirects a request for configuration data from the network entity, the configuration server sends the configuration data directly to the network entity. BatesDec2d, ¶182. In the ¶[0062] embodiment, however, the redirect server 14 “directly request[s]” and acquires configuration setting data—and then the redirect server 14 forwards that data to the network entity. *Id.*

For example, in the ¶¶[0043]-[0054] embodiment, the configuration server sends configuration data directly to the network entity—not via the redirect server 14. EX1006, ¶[0054]; BatesDec2d, ¶183. Step 116 in Figure 2, ¶[0055], and ¶[0057] of Angelot are other examples of the configuration server sending

configuration data directly to the network entity. BatesDec2d, ¶¶184-186.

Thus, Angelot specifically teaches that in all but one embodiment the configuration server 20 provides configuration data directly to the network entity 12. BatesDec2d, ¶187. And only in the ¶[0062] embodiment are the configuration data acquired by the central server from the configuration server—apparently because the central server makes a “*direct request*” to the configuration server for that data in this particular embodiment. And in this embodiment, the central server only *forwards* the configuration data to the network entity. *Id.*

Accordingly, the ¶[0062] embodiment cannot be combined with other embodiments because, in the other embodiments, the request always originates from the network entity and the configuration server always sends the configuration data directly to the network entity. In the ¶[0062] embodiment, however, the request does not originate from the network entity and the configuration server thus cannot forward the configuration data to it.

iv. ¶[0062] of Angelot does not disclose what triggers the redirect server to “directly request” configuration settings from the configuration server

Claim 2 requires “the ACSMD is configured, *responsive to receiving the request*, to: identify the manageable electronic device . . . identify an ACS from the plurality of ACSs in accordance with the identification of the manageable electronic

device . . .” The sequence recited in Claim 2 is triggered by the ACSMD receiving a request for configuration data from the manageable electronic device.

Petitioner cites Angelot ¶[0062] for Claim 2. Pet., 43 (quoting EX1006, ¶[0062]). In the ¶[0062] embodiment, however, the server 14 communicates with one of the configuration servers 20 to “directly request” and acquire configuration settings data. EX1006, ¶[0062]; BatesDec2d, ¶191. In direct contrast to this disclosure, Claim 2 requires that the ACSMD only request and receive configuration data “responsive” to receiving a request for that data from a manageable electronic device. Accordingly, even if the “[y]et another embodiment” of ¶[0062] is combined with other Angelot embodiments (such as the ¶¶[0043]-[0054] embodiment), Angelot still fails to anticipate Claim 2. BatesDec2d, ¶191.

v. Angelot does not disclose that the server 14 does any type of “processing” of a reply when “forwarding” configuration settings

Petitioner, at page 45, cites to ¶136 of Petitioner’s expert declaration (errantly labeled ¶135 in the Petition), stating:

For example, the phone “12a is typically identified by its MAC address” and “the configuration files on the configuration server 20a may be named using this information, for example, a configuration file named *iphone12a-mac-00-a1-b2-b3-c4-d5.cfg* would correspond to the IP phone 12 a having *00-a1-b2-b3-c4-d5* as its MAC address.” (*Id.* ¶52 (emphasis added).) Thus in response to receiving a configuration file

named iphone12a-mac-00-a1-b2-b3-c4-d5.cfg, the server 14 looks to database 22 to determine the MAC address of the phone where the configuration file will be provided/relayed. (Ex. 1002, ¶135.)

As discussed, however, the citation to a MAC address in “¶52” of Angelot refers to the “second mapping table” of configuration settings at the configuration server—not to database 22 at the central server 14. *Supra* p.37. Angelot ¶[0052] is concerned only with the association of configuration settings in the “second mapping table” with MAC addresses. BatesDec2d, ¶194.

Dr. Blumenthal’s assertion that “[i]n response to receiving a configuration file named iphone12a-mac-00-a1-b2-b3-c4-d5.cfg, the server 14 looks to database 22 to determine the MAC address of the phone where the configuration file will be provided/relayed,” EX1002, ¶136, is wrong. BatesDec2d, ¶195. First, there is no disclosure in Angelot of the second mapping table of “¶52” being accessed by the central server. *Id.* Second, Angelot discloses that the first mapping table in database 22 provides only a one-way mapping of MAC address to one or more configuration servers. *Id.* There is no disclosure in Angelot that the first mapping table contains any information that is or could be used by the central server to “determine the MAC address of the phone where the configuration file will be provided/relayed.” EX1002, ¶136; BatesDec2d, ¶195. Dr. Blumenthal’s assertion in ¶136 of EX1002 is unsupported.

Angelot ¶[0062], alone, discloses the server 14 “forwarding the configuration setting data to the network entity 12a.” *Supra* p.35. Thus, Petitioner and Petitioner’s expert have again mixed and matched distinct embodiments of Angelot in making an erroneous assertion. BatesDec2d, ¶196.

But even putting aside Petitioner’s and its expert’s reliance on Angelot ¶[0062] for disclosing “forwarding the configuration setting data to the network entity 12a,” there is simply no disclosure in ¶[0062] or anywhere else in Angelot of “in response to receiving a configuration file named iphone12a-mac-00-a1-b2-b3-c4-d5.cfg, the server 14 looks to database 22 to determine the MAC address of the phone where the configuration file will be provided/relayed.” BatesDec2d, ¶197. This assertion by Petitioner’s expert is also unsupported.

vi. A POSITA would not have considered ¶[0052] or ¶[0054] to understand ¶[0062] of Angelot

In the Institution Decision, the Board found that a POSITA “would have considered paragraph 52 to understand how the central server in Angelot’s paragraph 62 embodiment processes a request from a network entity.” ID, 24. But on a full record, for the reasons *supra* pp.34-38, this finding is incorrect. BatesDec2d, ¶¶199-204.

Angelot discloses that the “first mapping table” described in ¶[0052] only provides a one-way mapping. And ¶[0052] does not disclose anything about the

configuration server sending the configuration settings to either the IP phone associated with the MAC address or the central server. *Supra* p.36.

Thus, any assertion that “[f]irmware upgrades/downgrades may also be provided to the IP Phone 12a based on the MAC address” in ¶[0052] is a disclosure of sending, forwarding, or relaying anything to the IP phone based on the MAC address is a misinterpretation of Angelot. BatesDec2d, ¶204.

The Board’s finding that a POSITA “would have considered paragraph 52 to understand how the central server in Angelot’s paragraph 62 embodiment processes a reply from the configuration server,” ID, 24, may stem from a misapprehension that ¶[0052] teaches forwarding something to an IP phone based on MAC address. BatesDec2d, ¶205. But, as discussed, this is not the case. *Supra* pp.34-38.

Further, in the Institution Decision, the Board found that a POSITA “would have considered paragraph 54 to understand how the central server in Angelot’s paragraph 62 embodiment processes a request from a network entity.” ID, 23. But on a full record, for the reasons *supra* pp.34-38 this finding is incorrect. BatesDec2d, ¶¶207-210.

There is no disclosure in ¶[0054] or anywhere else in Angelot of processing by the central server 14 of a reply (that carries configuration data) in order to forward or redirect it to the IP phone 12a. BatesDec2d, ¶208. And there is no disclosure in

¶[0062] about processing any reply or other message by the central server in order to “forward” it to the network entity. BatesDec2d, ¶209.

Thus, a POSITA “[considering] paragraph 54 to understand how the central server in Angelot’s paragraph 62 embodiment processes a request from a network entity” would have found, at most, a disclosure of how to map MAC address *to* one or more configuration servers, but no disclosure, teaching, or suggestion about how to “process” configuration data in order to map it back to a network entity. BatesDec2d, ¶210.

The Board’s finding that a POSITA “would have considered paragraph 54 to understand how the central server in Angelot’s paragraph 62 embodiment processes a request from a network entity,” ID, 23, may stem from a misapprehension that the one-way mapping (i.e., first mapping table) in Angelot ¶[0054] would be instructive or relevant to forwarding anything from the central server to a network entity. BatesDec2d, ¶211. But, as discussed, this is not the case. *Supra* pp.34-38.

B. Ground 2: Angelot does not render obvious Claim 2

Angelot never refers to sending messages by “relaying,” but is expressly limited to sending messages by “forwarding” or “redirecting.” Accordingly, Petitioner would like to modify Angelot to simply replace the terms “forwarding” and

“redirecting” with “relaying” to allege that the Challenged Claims are obvious in light of Angelot. Pet., 55-57. Petitioner’s obviousness argument fails.

1. Petitioner misapplies Jin and the phrase “as known in the art” in the ’772 Patent

Petitioner cites to Jin (EX1008 (U.S. Patent Appl. Publ. 2003/0061315)) and bizarrely claims that “the ’772 patent admits that ‘relaying’ information was known in the prior art.” Pet., 3-4, 7, 57. But Jin was disclosed by KPN and considered by the Examiner during prosecution of the Child ’056 Patent. EX2003. Jin is no more than cumulative of art cited by KPN and considered by the Examiner during prosecution of the ’772 Patent. And what makes Petitioner’s claim that “the ’772 patent admits that ‘relaying’ information was known in the prior art” so bizarre is that KPN cited numerous references during prosecution—ones of which Jin is cumulative—specifically relating to relaying.

Indeed, Petitioner conflates the ’772 Patent’s statement “as known in the art” with an admission of something that was never denied or relied on in the contrary in the ’772 Patent or during prosecution. Specifically, asserting that “the ’772 patent admits that ‘relaying’ information was known in the prior art,” Pet., 57, Petitioner quotes EX1001, 5:56-61. But neither the ’772 Patent nor KPN ever claimed that “‘relaying’ information” was *not* known “in the prior art.” KPN even secured allowance of the ’772 Patent by citing numerous references during prosecution

explicitly discussing “relaying”—and how it differs from “forwarding.” EX1004, 21-62, 3-9. Prior art relating to “relaying” was known to and considered by the Examiner, and Jin’s general discussion of a “Subnet Relay Agent” (Pet., 57) adds nothing to what KPN had already disclosed to the Examiner.

2. Petitioner fails to prove motivation to modify Angelot to use “relaying” instead of “forwarding”

Petitioner claims that it would have been obvious to modify Angelot such that Angelot’s “forwarding” and “redirecting” were instead KPN’s claimed “relaying.” Pet., 55-56 (citing EX1002, ¶150). For support, Petitioner’s expert points to the phrase “known in the art” and makes the same mistake as Petitioner and claims *“Nothing about ‘relaying’ information from one server to another or from a server to a device is innovative. The ’772 patent admits as much, when it teaches that ‘relaying’ information was known in the prior art.”* EX1002, ¶151 (quoting EX1001, 5:56-61). As shown above, however, Dr. Blumenthal has made a fundamental error—the ’772 Patent’s statement of “as known in the art” is not an admission of anything otherwise proffered to have been unknown. *Supra* pp.51-52. Dr. Blumenthal essentially conflates what a POSITA could have done with obviousness, which is wrong. *Personal Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 993-94 (Fed. Cir. 2017).

Dr. Blumenthal next makes another mistaken assumption: “Also, as I previously mentioned, [KPN] asserts that relaying is simply sending or passing.” EX1002, ¶152 (citing EX1009, 54 [sic] n.10); Pet., 57. For reasons discussed *supra* V.A, Dr. Blumenthal’s understanding here is also incorrect.

Dr. Blumenthal next asserts that “[i]n my opinion, a [POSITA] would have recognized limited options for supplying the consumer device 12a with configuration data.” EX1002, ¶152; Pet., 57. This is simply not true, however. BatesDec2d, ¶213.

Angelot itself provides several different ways to do so in its various embodiments. BatesDec2d, ¶214. For example, ¶[0056] states “the IP phone 12a initiates the discovery process automatically to look for a configuration server 20a 20b or 20c to retrieve its configuration data and/or its firmware.” EX1006, ¶[0056]. ¶[0058] discusses obtaining configuration settings via a browser with a default homepage as part of its factory settings. *Id.* ¶[0058]. And ¶[0060] discusses a configuration server providing configuration data after automatically detecting connection of an IP phone to the network. *Id.* ¶[0060]. Thus, “limited options” are not true, and would not have been a source of motivation. BatesDec2d, ¶214.

In further attempting to create motivation, Dr. Blumenthal alleges that “the claimed relaying of ‘the request to the identified ACS’ and relaying of ‘the reply to the manageable electronic device’ is, at most, a predictable variation of Angelot’s system.” EX1002, ¶153; Pet., 58. But that is not motivation. BatesDec, ¶152. Dr.

Blumenthal is simply replacing Angelot’s “forwarding” and “redirecting” with KPN’s claimed concept of “relaying” when there is absolutely no reason or advantage to do so. *Id.* That is hindsight—not motivation.

The Petition does likewise. For example, the Petition states:

Indeed, processing (i.e., modifying) the request before sending it to the proper configuration server *would have beneficially provided a mechanism* for straightforward and accurate automatic configuration of the network entity 12a ***“without user intervention except to power-on and connect the at least one network entity to the network in order to contact the central server.”*** (Ex. 1006, ¶21; Ex. 1002, ¶155.)

Pet., 60 (emphasis added); EX1002, ¶156. Petitioner and Dr. Blumenthal are just quoting Angelot and identifying what Angelot’s embodiments are purporting to achieve—without “relaying.” BatesDec2d, ¶216.

Dr. Blumenthal’s assertion in EX1002, ¶156, cited by the Petition, is misleading. BatesDec2d, ¶217. The alleged benefit of “accurate automatic configuration of the network entity 12a” cites to Angelot ¶[0021]: ***“whereby*** the at least one network entity is automatically configured without user intervention except to power-on and connect the at least one network entity to the network in order to contact the central server,” which is the conclusion of steps disclosed in ¶¶ [0012]-[0021]. EX1006, ¶[0021] (emphasis added.) The term “whereby” that starts ¶[0021] would have informed a POSITA that what follows is achieved by at least one or

more of the preceding steps of ¶¶[0012]-[0021]. BatesDec2d, ¶217. Thus, a POSITA would have understood this to mean that the alleged benefit is already taught by Angelot, and there would have been no motivation to look elsewhere. *Id.*

But even assuming, *arguendo*, that “processing (i.e., modifying) the request before sending it to the proper configuration server” were to be perceived as providing the benefit alleged by Dr. Blumenthal, a POSITA would have recognized that Angelot purports to teach this too. *Id.* ¶218. Specifically, the step of “receiving the request at the central server and determining which of the at least one of the service providers is associated with the identifier” in ¶[0018] would have been recognized as corresponding to “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” disclosed in ¶[0054]. EX1006, ¶[0054]. A POSITA would not have found anything to modify in Angelot’s teachings. BatesDec2d, ¶218.

As discussed, the processing of the request disclosed in ¶[0054]—the one and only such teaching in Angelot—has been mapped by Petitioner to [1g], whereas the processing required by the two District Courts’ constructions of “relay” is part of [1h], which is a different limitation. *Supra* VII.A.2.ii. Thus, the “processing (i.e., modifying) the request before sending it to the proper configuration server” that Dr.

Blumenthal alleges would be beneficial is already taught by Angelot, but mapped by Petitioner to [1g], so it cannot also be applied to transforming “forwarding” taught by Angelot into “relaying.” BatesDec2d, ¶219.

The Petition argues further that motivation can be found among the advantages of preventing “unauthorized devices from being configured.” Pet., 65; EX1002, ¶164. But Angelot already discloses such an embodiment in ¶[0057], and no relaying is involved. EX1006, ¶[0057]; BatesDec2d, ¶220. After authentication, configuration settings data can be sent by forwarding; relaying is not described or an advantage. BatesDec2d, ¶220.

Petitioner’s and its expert’s attempts to modify Angelot to use “relaying” amount to no more than suggesting Angelot *could* be modified to use relaying, and do not support a POSITA being motivated to make such a modification. *Personal Web*, 848 F.3d at 993-94. Further, Petitioner’s assertions regarding modifying Angelot are based on a solution to a problem that does not exist in Angelot, and thus a POSITA would not have been motivated to modify Angelot to solve a non-existent problem. *Arctic Cat Inc. v. Polaris Indus., Inc.*, 795 F. App’x 827, 833 (Fed. Cir. 2019). Rather, modifying Angelot as proposed to replace one perfectly acceptable method of sending requests (“forwarding” and “redirecting”) with a completely different method of sending requests (“relaying”) as recited in the Challenged Claims

would be “superfluous,” which indicates “improper hindsight reasoning.” *In re NTP, Inc.*, 654 F.3d 1279, 1299 (Fed. Cir. 2011).

In the Institution Decision, the Board found that “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.” ID, 27 (citing EX1002, ¶¶154-159). But on a full record, this finding is incorrect. BatesDec2d, ¶¶222-225.

Because Angelot’s embodiments already purport to “ensure that the appropriate configuration server receives a request,” ID, 27, with forwarding and redirecting the request, Petitioner has not proven why a POSITA would have been motivated to modify Angelot to relay the request. BatesDec2d, ¶224. Petitioner’s Ground 2 simply seeks to substitute a redundant feature (relaying the request) to Angelot, without explaining why a POSITA would have concluded that Angelot needed to be modified. *In re Anova Hearing Labs, Inc.*, 809 F. App’x 840, 843 (Fed. Cir. 2020); *South-Tek Sys., LLC v. Engineered Corrosion Sols., LLC*, 748 F. App’x 1003, 1007 (Fed. Cir. 2018). Petitioner’s alleged reason to modify Angelot to relay the request would have been to obtain a benefit that is already taught by Angelot in forwarding or redirecting the request. BatesDec2d, ¶224.

Further, because Angelot’s embodiments already purport to “ensure that . . . the appropriate network entity receives a reply,” ID, 27, with forwarding and redirecting the reply, Petitioner has not proven why a POSITA would have been motivated to modify Angelot to relay the reply. BatesDec2d, ¶225. Again, Petitioner’s Ground 2 simply seeks to substitute a redundant feature (relaying the reply) to Angelot, without explaining why a POSITA would have concluded that Angelot needed to be modified. *Anova*, 809 F. App’x at 843; *South-Tek Sys.*, 748 F. App’x at 1007. Petitioner’s alleged reason to modify Angelot to relay the reply would have been to obtain a benefit that is already taught by Angelot in forwarding or redirecting the reply. BatesDec2d, ¶225.

On a full record, *Intel Corp. v. PACT XPP Schweiz AG*, 61 F.4th 1373 (Fed. Cir. 2023), cited by the Board in the Institution Decision, is distinguishable. Petitioner’s Ground 2 is a single-reference obviousness ground based on Angelot, whereas *Intel* involved a combination of multiple prior art references. 61 F.4th at 1380. Further, KPN has presented evidence that Ground 2 seeks to substitute redundant features to Angelot, without explaining why a POSITA would have concluded that Angelot needed to be modified, whereas the *Intel* court did not address redundancy. *See* 61 F.4th at 1379-1381.

C. Ground 3: Angelot and Zakurdaev do not render obvious Claim 2

1. Zakurdaev does not teach “relay”

Zakurdaev discloses a “Smart DHCP Relay server” and Petitioner cites it for the concept of relaying a message. Pet., 68. Zakurdaev, however, does not teach “relay the request” or “relay the reply” recited in Claim 2. In Zakurdaev, the “relay” is a device—not an action; Zakurdaev describes only a relay device that forwards—not relays. BatesDec2d, ¶229.

For example, Zakurdaev ¶[0012] discloses forwarding. EX1007, ¶[0012]. As forwarding a request is well-known and taught by Angelot, Zakurdaev is merely cumulative of other references. BatesDec2d, ¶231. Zakurdaev does not teach anything beyond what Angelot teaches regarding forwarding. *Id.*

Similar to the Petition’s mischaracterization Angelot (*supra* VII.A.1), the Petition misleadingly cites to Zakuradev and replaces Zakuradev’s use of “transmitting,” “forwarded,” and “forwards,” with “relays” in the Petition. Pet., 68-69 (EX1007, ¶¶[0014], [0027])).⁵ Petitioner provides no support for revising the actual words of Zakurdaev to make the reference more convenient for Petitioner’s positions.

⁵ It is unclear how Zakurdaev ¶[0027] supports the statement on page 68 of the Petition “The DHCP Relay then relays the DHCPDISCOVER (blue) to the DHCP server at the ISP” at all, but perhaps Petitioner meant to actually cite Zakurdaev ¶[0026], which also discloses forwarding—not relaying.

Petitioner’s reliance on Zakurdaev ¶[0014] is also misplaced. BatesDec2d, ¶232. To begin, ¶[0014] refers to the “ISP” sending the “IP address to the subscriber equipment,” and not the Smart DHCP Relay. EX1007, ¶[0014]. Further, ¶[0014] refers to “transmitting” the “IP address”—there is no teaching that the ISP or the Smart DHCP relays the IP address. *Id.*

In the Institution Decision, the Board found that “Zakurdaev also teaches that the DHCP relay ‘stores (*maps*)’ the IP address reply from the ISP and then sends it the user terminal,” and “[t]hus, consistent with the district court’s construction of the term ‘relay,’ Zakurdaev teaches that the DHCP processes the request and the reply.” ID, 29 (citing EX1007, ¶[0027]). But on a full record, these findings are incorrect. BatesDec2d, ¶233-235.

Zakurdaev’s teaching of storing the IP address is not processing the reply based on its payload. BatesDec2d, ¶234. ¶[0027], cited by the Board, states “[t]he Smart DHCP Relay 212, upon receiving the DHCPOFFER signal, stores (*maps*) an IP address for the ISP server 216 to a subscriber MAC address.” EX1007, ¶[0027]. A POSITA would have understood that the IP address for the ISP sending a DHCPOFFER would be in the message header. BatesDec2d, ¶234 (discussing EX1012, cited by Petitioner). The two District Courts’ constructions of “relay” as related to “process” is “process . . . a request based at least in part on its *payload*.”

EX2012, 46; EX1005, 60-61 (emphasis added in both). Thus, Zakurdaev ¶[0027] is not consistent with the District Courts’ constructions of “relay.” BatesDec2d, ¶235.

2. Petitioner fails to prove motivation to combine Angelot and Zakurdaev

Zakurdaev does not cure Angelot’s deficiencies. Angelot ¶[0056] describes DHCP as follows:

Typically, in a managed enterprise LAN, or SOHO network, environment with DHCP being enabled, the configuration settings are provided using Option 66/Option 67. *In addition to its IP address, the DHCP server could provide the IP phone 12a with a DNS server, a default gateway. It can also be configured to provide the IP address of the central server 14.* If the URI of the central server 14 is specified, the IP phone 12a uses any suitable protocol to contact the central server 14 on the network 16.

EX1006, ¶[0056] (emphasis added).

Thus, in Angelot, the DHCP step precedes the request for configuration. Zakurdaev’s teachings of DHCP do not help Angelot’s teachings regarding network entity configuration. Angelot is not concerned with getting access to a DHCP server. Instead, “the DHCP server” is a given in Angelot. EX1006, ¶[0056]; BatesDec2d, ¶237.

Petitioner’s assertion that Angelot “does not provide details on how to utilize DHCP communications” (Pet., 70) misses the point. Angelot ¶[0056]

is clear in the role of the DHCP server, and that it differs from that of the central server 14 and the configuration server 20a, 20b, or 20c. EX1006, ¶[0056]; BatesDec2d, ¶238.

In Angelot, the DHCP server is separate from the central server 14, and serves a different role: it provides the IP phone 12a with an IP address, and possibly the IP address of the central server 14. EX1006, ¶[0056]. The IP phone 12a must first communicate with the DHCP server before it can engage with the central server 14. *Id.*; BatesDec2d, ¶239.

Petitioner's proposed combination would have the IP phone send a request for configuration and IP address to a combination of Zakurdaev's DHCP server and Angelot's central server via a combination of Zakurdaev's DHCP Smart Relay and Angelot's configuration server. Pet., 70. But Angelot teaches that the IP phone 12a ***first*** gets an IP address directly from a DHCP server, and ***only after*** that sends a request to a configuration server 20a, 20b, or 20c via the central server 14. EX1006, ¶[0056]; BatesDec2d, ¶¶240-41.

Thus, Petitioner's proposed combination would have the IP phone send a request for configuration and IP address to Zakurdaev's DHCP server (mapped to Angelot's configuration server) via Zakurdaev's DHCP Smart Relay (mapped to Angelot's central server), where Angelot teaches that the IP phone first gets an IP address directly from a DHCP server, and only after

that sends a request to a configuration server via the central server. Petitioner has provided no reason why a POSITA would have been motivated to modify Angelot's teachings in this way. BatesDec2d, ¶241.

Further, Petitioner's proposed combination is redundant, which indicates that a POSITA would have had no reason to combine Angelot and Zakurdaev. *Anova*, 809 F. App'x at 843; *South-Tek Sys.*, 748 F. App'x at 1007; BatesDec2d, ¶242. As discussed, Zakurdaev does not teach anything beyond what Angelot teaches regarding forwarding. *Supra* p.61. Petitioner has not shown that Zakurdaev's DHCP teachings are any different from those of Angelot in connection with sending requests and/or responses between the IP phone 12a and the configuration server 20a, 20b, or 20c, via the central server 14. BatesDec2d, ¶242.

Not only does Petitioner's proposed combination fail to provide any advantage to Angelot, it does not even change or add to any of the actual actions already disclosed in Angelot. BatesDec2d, ¶243. If the term "Relay" in Zakurdaev is replaced with "Device," and the Petition's repeated use of "relay" in place of "forward," "send," and/or "transmit" (Pet., 68-69) is ignored, then a POSITA would have been left with no improvement to Angelot or any action beyond what is already taught. BatesDec2d, ¶243.

Because Angelot and Zakurdaev purportedly independently operate effectively, a POSITA, who was merely seeking to create a better system, would have had (i) no reason to combine Zakuradev's DHCP server with Angelot's central server into a single system, and (ii) no reason to combine Zakurdaev's DCHP Smart Relay with Angelot's configuration server into a single system. *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1369 (Fed. Cir. 2012); BatesDec2d, ¶244.

D. Claims 11, 14, and 16 are patentable

Claims 11, 14, and 16 recite similar subject matter as Claim 2, and therefore these claims are patentable over Angelot and Zakuradev for at least the same reasons that Claim 2 is patentable. *Supra* p.15.

VIII. ALL CLAIMS: ANGELOT DOES NOT DISCLOSE, TEACH, OR SUGGEST LIMITATION [1G]

Angelot's failure to disclose [1g] is an additional reason that the Challenged Claims are patentable. Again, Angelot teaches:

Upon 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. Once such a determination has been established, the central server 14 then redirects the request to an appropriate *service provider* 18a, 18b or 18c, as per first mapping table (*step 114*).

EX1006, ¶[0054] (emphasis added).

“[S]tep 114” in Figure 2, however, reads “Redirect request to appropriate **configuration server** 20a.” *Id.* FIG. 2 (emphasis added). While this apparent interchangeable use of “service provider” and “configuration server” might at first seem inconsequential, consideration of Figure 3a strongly suggests otherwise.

In particular, each of “service provider[s] 18a and 18b” are shown in Figure 3a to include multiple “configuration servers.” EX1006, FIG. 3a. This fact, together with the redirection of the request to “an appropriate **service provider** 18a, 18b or 18c” disclosed in ¶[0054] indicates that there is more to determining the “appropriate configuration server” than finding the MAC address in the “first mapping table.” BatesDec2d, ¶249. For example, if a request is redirected to “service provider 18a,” which of the five “configuration servers” shown in Figure 3a receives the request?

Adopting, *arguendo*, Petitioner’s interpretation of the “configuration server” in Angelot as the “ACS” of the Challenged Claims (Pet., 25), there is at least an ambiguity as to whether Angelot can actually be interpreted as teaching “identify an ACS from the plurality of ACSs in accordance with the identification of manageable electronic device”—identified by the Petition as part of [1g]. BatesDec2d, ¶250. That is, on the basis of ¶[0054], Angelot at most might be interpreted as teaching “identify [**a service provider**] from the plurality of [**service providers**] in accordance with the identification of manageable electronic device.”

If the identified “service provider” happens to be “service provider 18a,” then, according to Figure 3a, an extra, undisclosed step appears to be required to further identify a “configuration server” from among the five configuration servers in the “first mapping table.” BatesDec2d, ¶251. With or without the extra, undisclosed step, this fails to disclose [1g]: “identify an ACS from the plurality of ACSs in accordance with the identification of manageable electronic device to provide configuration data to the manageable device.”

Another problem with Figure 3a is that MAC address 00-54-11-A2-33-F6 is listed for two different service providers and at two different IP addresses. EX1006, FIG. 3a (listing 00-54-11-A2-33-F6 for both SP 18b and SP 18c); BatesDec2d, ¶252. The same MAC address for two different service providers at two different IP address would cause a conflict for the network 16, and further supports there is an ambiguity as to whether Angelot actually discloses [1g]. *Id.*

In its Decision Denying Rehearing, the Board found that “[t]he portions of Angelot cited by Petitioner disclose an embodiment in which each service provider includes one configuration server,” and “Angelot’s Figure 1 shows that each service provider 18a, 18b, and 18c includes one configuration server 20a, 20b, or 20c.” Paper 12 (“Reh’g Decision”), 3-4. But on a full record, these findings are incorrect. BatesDec2d, ¶¶253-259.

First, Petitioner disavowed the “each service provider includes one configuration server” interpretation of Angelot in the *Ericsson* Litigation. BatesDec2d, ¶255. Thus, this interpretation is not presented by Petitioner in the IPR. *Magnum Oil Tools Int’l*, 829 F.3d at 1381.

During the *Markman* hearing in the *Ericsson* Litigation, after the Petitioner filed the Petition but before the Board’s Rehearing Decision, Petitioner argued to the District Court that “[t]he service provider of Angelot cannot be equated with the configuration server in Angelot, something made clear by Figure 3a, which shows that a service provider may host multiple configuration servers.” Transcript of *Markman* Hearing (EX2014), 81:21-25; *see also id.* at 78:9-18 (Petitioner discussing Angelot FIG. 3a). Petitioner’s arguments regarding Angelot in the District Court were in support of Petitioner’s proposed constructions of “plurality of auto-configuration servers (ACSs)” and “ACS,” which the District Court rejected. EX2012, 47-50. Petitioner cannot “twist[]” Angelot one way for unpatentability before the Board, and another way for noninfringement before the District Court. *Compare Commscope Techs. LLC v. Dali Wireless Inc.*, 10 F.4th 1289, 1299 (Fed. Cir. 2021) (discussing the “nose of wax” principle).

Further, the Board’s findings in the Rehearing Decision that Angelot “disclose[s] an embodiment in which each service provider includes one configuration server,” and “Angelot’s Figure 1 shows that each service provider 18a, 18b, and 18c

includes one configuration server 20a, 20b, or 20c,” Reh’g Decision, 3-4, discount the interrelatedness of Angelot’s Figure 3a to the remainder of Angelot and Petitioner’s citation of Figure 3a in the Petition. BatesDec2d, ¶256.

Angelot ¶[0051] discloses “a first mapping table which is maintained in a memory associated with the central server 14 (step 106), as shown in FIG. 3a.” and Petitioner relies on the first mapping table and Figure 3a for its mapping of multiple different limitations and claims of the ’772 Patent. Pet., 30 ([1d]), 36-38 ([1g]), 38 ([1h]), 43, 46 (Claim 2), 48 (Claim 4), 49 (Claim 5), 59, 62, 65-66 (Ground 2), 68 (Ground 3). Petitioner also repeatedly annotates Figure 3a in the Petition. Pet., 36-37, 46, 49-50, 59, 62.

Figure 3a does not “disclose an embodiment in which each service provider includes one configuration server.” Reh’g Decision, 3; EX2014, 78, 81; BatesDec2d, ¶257. Figure 3a is not a different embodiment of Angelot, as shown by Petitioner’s reliance on Figure 3a in the Petition. *Id.* ¶258. Deeming Figure 3a to be a separate embodiment would be inconsistent with Petitioner’s reliance on the combination of the ¶¶[0043]-[0054] and ¶[0062] embodiments of Angelot for alleged anticipation of the Challenged Claims. *Id.*

IX. CONCLUSION

KPN respectfully requests that the Board confirm the patentability of Claims 2-6, 11, 14, and 16 of the ’772 Patent.

Dated: December 5, 2023

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CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITS

The undersigned certifies pursuant to 37 C.F.R. § 42.24 that the foregoing Patent Owner's Response, excluding any table of contents, mandatory notices under 37 C.F.R. § 42.8, certificates of service or compliance, or appendix of exhibits, contains 13,968 words according to the word-processing program used to prepare this document (Microsoft Word).

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), I hereby certify that on December 5, 2023 the foregoing Patent Owner's Preliminary Response is being served electronically by agreement of the parties, by email to the following counsel of record.

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