

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AT&T SERVICES, INC.,
Petitioner,

v.

VOIP-PAL.COM, INC.,
Patent Owner.

Case IPR2017-01382
Patent 8,542,815 B2

Before JOSIAH C. COCKS, JENNIFER MEYER CHAGNON, and
JOHN A. HUDALLA, *Administrative Patent Judges*.

HUDALLA, *Administrative Patent Judge*.

DECISION

Denying Institution of *Inter Partes* Review
35 U.S.C. § 314(a) and 37 C.F.R. § 42.108

Petitioner, AT&T Services, Inc. (“Petitioner”), filed a Petition (Paper 1, “Pet.”) requesting an *inter partes* review of claims 1, 7, 27, 28, 34, 54, 72–74, 92, 93, and 111 of U.S. Patent No. 8,542,815 B2 (Ex. 1001, “the ’815 patent”) pursuant to 35 U.S.C. §§ 311–319. Petitioner proffered a Declaration of James Bress (Ex. 1003) with its Petition. Patent Owner,

Voip-Pal.com, Inc. (“Patent Owner”), filed a Preliminary Response (Paper 5, “Prelim. Resp.”) to the Petition.

Under 35 U.S.C. § 314(a), the Director may not authorize an *inter partes* review unless the information in the petition and preliminary response “shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” For the reasons that follow, we do not institute an *inter partes* review of the ’815 patent.

I. BACKGROUND

A. *Related Proceedings*

The parties identify the following district court cases related to the ’815 patent (Pet. 2; Paper 4, 1):

Voip-Pal.com, Inc. v. Verizon Wireless Services, LLC, 2-16-cv-00271 (D. Nev. filed Feb. 9, 2016);

Voip-Pal.com, Inc. v. Apple, Inc., 2-16-cv-00260 (D. Nev. filed Feb. 9, 2016); and

Voip-Pal.com, Inc. v. Twitter, Inc., 2:16-cv-2338 (D. Nev. filed Oct. 6, 2016).

The parties also state that the ’815 patent is being challenged or was challenged in IPR2016-01082, IPR2016-01201, and IPR2017-01399. Pet. 2–3; Paper 4, 1. In addition, Petitioner also has challenged related U.S. Patent 9,179,005 (“the ’005 patent”), which also is owned by Patent Owner, in IPR2017-01383 and IPR2017-01384. Paper 4, 1. Patent Owner also states that the ’005 patent is being challenged or was challenged by another Petitioner in IPR2016-01198 and IPR2017-01398. *Id.*

B. The '815 patent

The '815 patent is directed to classifying a call as a public network call or a private network call and producing a routing message based on that classification. Ex. 1001, Abstract. Figure 7 of the '815 patent is shown below:

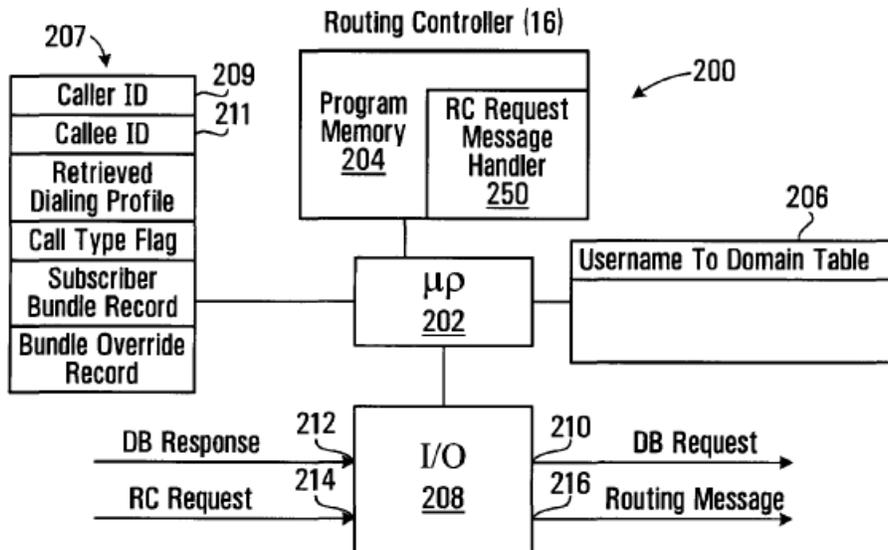


FIG. 7

Figure 7 illustrates a routing controller that facilitates communication between callers and callees. *Id.* at Fig. 7, 14:24–25, 17:16–17. Routing controller (RC) 16 includes RC processor circuit 200, which in turn includes processor 202, program memory 204, table memory 206, buffer memory 207, and I/O port 208. *Id.* at 17:17–22. Routing controller 16 queries database 18 (shown in Figure 1) to produce a routing message to connect caller and callee. *Id.* at 14:10–17, 14:24–34. Program memory 204 includes blocks of code for directing processor 202 to carry out various functions of the routing controller. *Id.* at 17:38–40. Those blocks of code

include RC request message handler 250, which directs the routing controller to produce the routing message. *Id.* at 17:40–44.

According to the '815 patent, in response to a calling subscriber initiating a call, the routing controller:

receiv[es] a callee identifier from the calling subscriber, us[es] call classification criteria associated with the calling subscriber to classify the call as a public network call or a private network call[,] and produc[es] a routing message identifying an address on the private network, associated with the callee[,] when the call is classified as a private network call and produc[es] a routing message identifying a gateway to the public network when the call is classified as a public network call.

Id. at 14:24–34.

Figures 8A through 8D of the '815 patent illustrate a flowchart of an RC request message handler executed by the RC processor circuit. *Id.* at 10:62–63. Figure 8B of the '815 patent is shown below:

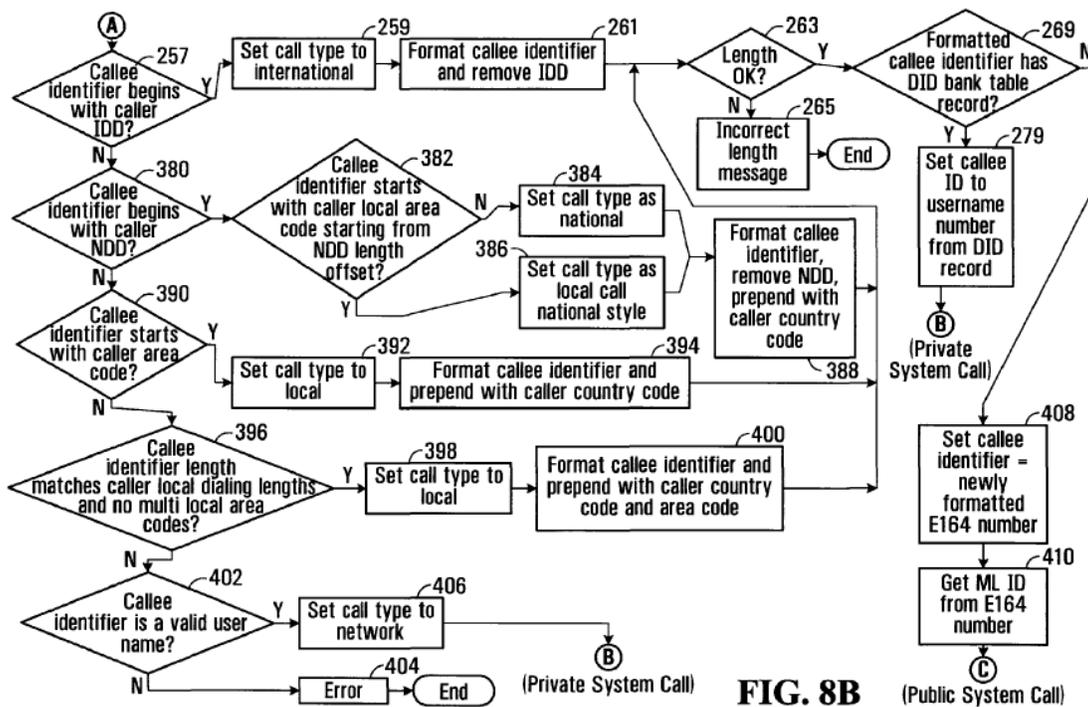


Figure 8B illustrates steps for performing checks on the callee identifier. *Id.* at 19:45–49, Fig. 8B. Blocks 257, 380, 390, 396, 402 effectively “establish call classification criteria for classifying the call as a public network call or a private network call.” *Id.* at 22:48–51. For example, block 402 “directs the processor 202 of FIG. 7 to classify the call as a private network call when the callee identifier complies with a predefined format, i.e. is a valid user name and identifies a subscriber to the private network” *Id.* at 22:54–60. Block 269 also classifies the call as public or private, depending on whether the callee is a subscriber to the system. *Id.* at 22:51–23:8, 20:14–24; *see also id.* at 18:55–19:22.

C. Illustrative Claim

Of the challenged claims of the '815 patent, claims 1, 27, 28, 54, 74, and 93 are independent. Claim 7 depends from claim 1; claim 34 depends from claim 28; claims 72 and 73 depend from claim 54; claim 92 depends from claim 74; and claim 111 depends from claim 93. Claim 1 is illustrative of the challenged claims and recites:

1. A process for operating a call routing controller to facilitate communication between callers and callees in a system comprising a plurality of nodes with which callers and callees are associated, the process comprising:

in response to initiation of a call by a calling subscriber, receiving a caller identifier and a callee identifier;

locating a caller dialing profile comprising a username associated with the caller and a plurality of calling attributes associated with the caller;

determining a match when at least one of said calling attributes matches at least a portion of said callee identifier;

classifying the call as a public network call when said match meets public network classification criteria and classifying the call as a private network call when said match meets private network classification criteria;

when the call is classified as a private network call, producing a private network routing message for receipt by a call controller, said private network routing message identifying an address, on the private network, associated with the callee;

when the call is classified as a public network call, producing a public network routing message for receipt by the call controller, said public network routing message identifying a gateway to the public network.

Id. at 36:14–38.

D. The Prior Art

Petitioner relies on the following prior art:

Nadeau, U.S. Patent No. 6,240,449 B1, filed Nov. 2, 1998, issued May 29, 2001 (Ex. 1005, “Nadeau”);

Kelly, U.S. Patent No. 6,594,254 B1, filed Aug. 14, 1997, issued July 15, 2003 (Ex. 1006, “Kelly”); and

Vaziri et al., U.S. Patent No. 7,715,413 B2, filed Oct. 25, 2004, issued May 11, 2010 (Ex. 1007, “Vaziri”).

E. The Asserted Grounds

Petitioner challenges claims 1, 7, 27, 28, 34, 54, 72–74, 92, 93, and 111 of the ’815 patent on the following grounds (Pet. 4):

References	Basis	Claims Challenged
Nadeau and Kelly	35 U.S.C. § 103(a)	1, 7, 27, 54, 72–74, and 92
Nadeau, Kelly, and Vaziri	35 U.S.C. § 103(a)	28, 34, 93, and 111

F. Claim Interpretation

In an *inter partes* review, we construe claims by applying the broadest reasonable interpretation in light of the specification. 37 C.F.R. § 42.100(b); *see Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016).

Under the broadest reasonable interpretation standard, and absent any special definitions, claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *See In re Translogic Tech. Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Any special definitions for claim terms or phrases must be set forth “with reasonable clarity, deliberateness, and precision.” *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

On the current record, we determine that no terms require explicit construction at this time. *See Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (“[O]nly those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy”).

II. ANALYSIS

We now consider Petitioner’s asserted grounds and Patent Owner’s arguments in the Preliminary Response to determine whether Petitioner has met the “reasonable likelihood” threshold standard for institution under 35 U.S.C. § 314(a).

A. *Obviousness Ground Based on Nadeau and Kelly*

Petitioner contends claims 1, 7, 27, 54, 72–74, and 92 would have been obvious over Nadeau and Kelly. Pet. 16–39. Patent Owner disputes Petitioner’s contention. Prelim. Resp. 14–41, 46–62.

1. *Nadeau*

Nadeau is a patent directed to telephony systems that “provide subscribers with communication sessions across a variety of network domains, such as the Public Switched Telephone Network (PSTN), the Mobile network and the Internet.” Ex. 1005, 1:7–12. Figure 1 of Nadeau is reproduced below.

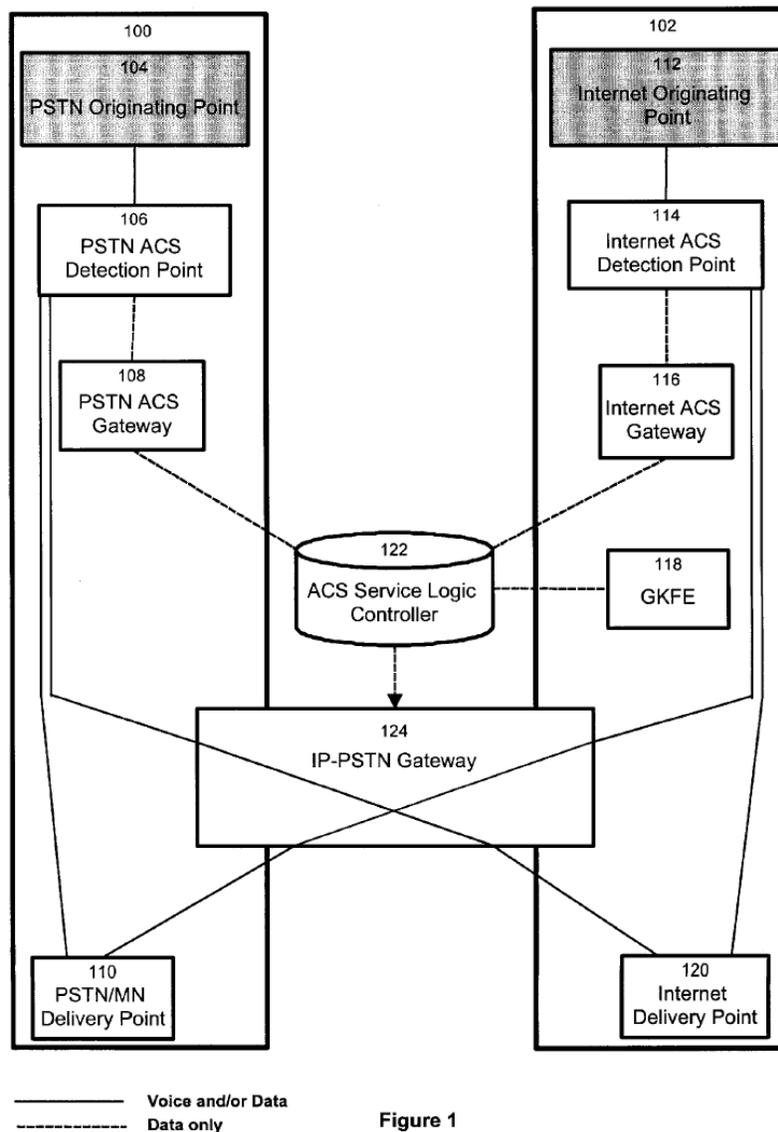


Figure 1

Figure 1 “is a block diagram of a multi-domain communication session disposition system incorporating an Automatic Call Setup [ACS] service.” *Id.* at 6:1–3. Figure 1 depicts PSTN network domain 100 and Internet domain 102, each of which issue and receive communications that can be telephone-related messages or data. *Id.* at 6:47–54. ACS subscribers originate calls through either PSTN Originating Point Functional Element (OPFE) 104 (e.g., a phone in the PSTN network) or Internet OPFE 112 (e.g., a multimedia PC). *Id.* at 6:58–65. PSTN Detection Point Functional

Element (DPFE) 106 and Internet DPFE 114 are each responsible for identifying call requests that require ACS treatment. *Id.* at 6:59–7:1. Internet DPFE 114 is a voice over Internet Protocol (VoIP) client. *Id.* at 12:39. If ACS treatment is needed in the PSTN domain, PSTN DPFE 106 will suspend call processing and originate a request for instructions to Service Logic Controller (SLC) 122 via a PSTN Gateway Functional Element (GWFE) 108, which is responsible for “mediat[ing] the instruction requests/responses from/to the DPFE to/from the SLC.” *Id.* at 7:1–5, 7:13–15. Internet GWFE 116 performs the same function in the Internet domain and likewise links Internet DPFE 114 with SLC 122. *Id.* at 7:15–19.

SLC 122 is a server that includes a memory for storage of program elements for implementing different functions necessary to the disposition of communication sessions. *Id.* at 7:31–34. SLC 122 includes a central processing unit and mass storage unit holding a Subscriber Database. *Id.* at 7:34–36. SLC 122 provides DPFEs with call processing instructions by consulting the Subscriber Database for a particular caller’s service profile and a list of conditions and events to be used to process the caller’s incoming calls. *Id.* at 7:24–27, 7:36–40. SLC 122 is coupled to Gatekeeper Functional Element (GKFE) 118 in the Internet domain for mapping pseudo-addresses into IP addresses. *Id.* at 4:6–42, 7:41–8:6.

When a call originating from one domain terminates on the other domain, the ACS system forwards the call to PSTN/IP gateway 124 for proper bridging. *Id.* at 11:29–31. Information on how to complete the call also is sent to PSTN/IP gateway 124 by SLC 122. *Id.* at 11:31–33, 12:11–18, 13:34–41, Figs. 1, 3, 4.

2. *Kelly*

Kelly is a patent directed to “a technique for enabling communication connections between circuit-switched communication networks and packet-switched data processing networks.” Ex. 1006, 1:59–63. The technique “enables traditional telephone numbers formatted as domain names to be resolved into network protocol addresses.” *Id.* at 3:45–47. Figure 6 of *Kelly* is reproduced below.

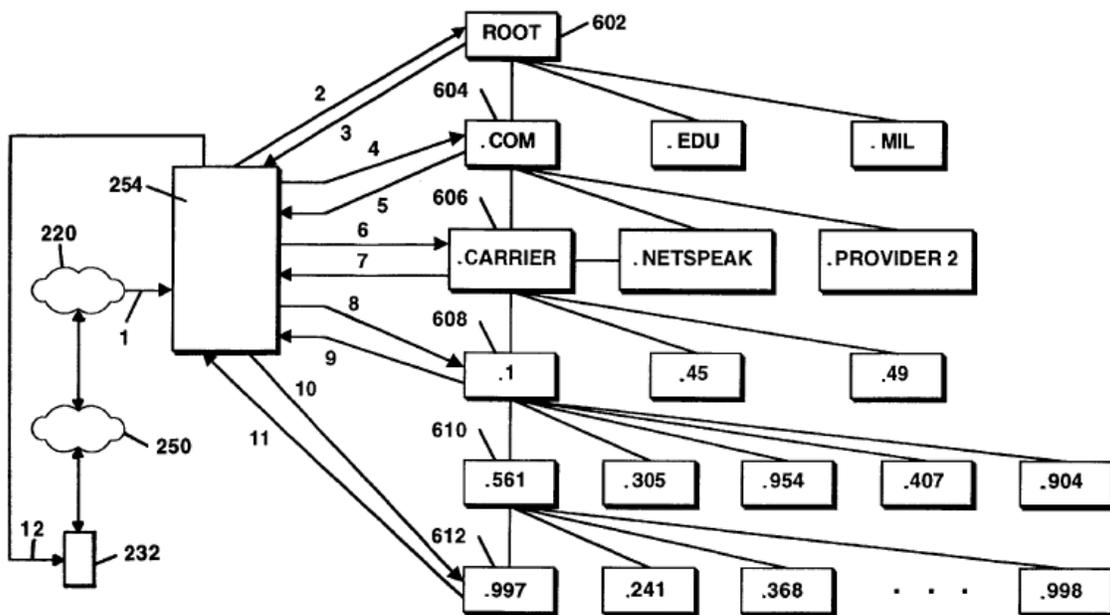


Figure 6

Figure 6 depicts the steps utilized to resolve a telephone number to a network address of a gateway. *Id.* at 4:65–67. Upon receiving a traditional telephone number (e.g., “1-561-997-4001”) from a user, Internet telephone/WebPhone client 232 “reverses the number and appends the carrier’s domain name[,] resulting in a hybrid telephone/domain name having the form ‘4001-997-561-1.carrier.com.’” *Id.* at 6:58–67, 11:50–12:14. *Kelly* goes on to describe “a recursive process of resolving the

telephone number domain name previously entered into the WebPhone client to the appropriate IP address of a gateway on a PSTN”:

In step 1, the WebPhone client 232 forwards the telephone number domain name to primary name server 254 in packetized form via Internet 220 and ISP 250. Using a name packet, primary name server 254 queries the root name server of the domain name system (DNS) for the address of “4001.997.561.1.carrier.com” in step 2. The name server for the DNS root returns a reference to the name server for “.com” in step 3. Next, name server 254 queries the referenced name server “.com” for the address of “4001.997.561.1.carrier.com” in step 4. In response, a referral to “carrier.com” is returned in step 5. Name server 254 then queries the name server “carrier.com” for “4001.997.561.1.carrier.com” in step 6. In response, a referral to “1.carrier.com” is returned in step 7. Name server 254 then queries the name server to “1.carrier.com,” for “4001.997.561.1.carrier.com” in step 8. In response a reference of “561.1.carrier.com”, is returned in step 9. Name server 254 then queries name server for “561.1.carrier.com,” in step 10 for “4001.997.561.1.carrier.com.” In response, a reference to “997.561.1.carrier.com” is returned in step 11. This last reference contains the IP address of the desired gateway which is then forwarded via Internet 220 and ISP 250 to WebPhone client 232 by name server 254 in step 12.

Id. at 12:32–57.

After step 12, “the call packet containing the entire telephone number domain name entry ‘4001.997.561.1.carrier.com’ is then sent to initiate a call session to the IP address of the gateway . . . , and the call is offered.” *Id.* at 13:22–26.

3. *Claim 1*

A claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject

matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007).

The question of obviousness is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) where in evidence, so-called secondary considerations. *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

We also recognize that prior art references must be “considered together with the knowledge of one of ordinary skill in the pertinent art.” *In re Paulsen*, 30 F.3d at 1480 (citing *In re Samour*, 571 F.2d 559, 562 (CCPA 1978)). We analyze Petitioner’s obviousness grounds with the principles identified above in mind.

a. Petitioner’s Obviousness Analysis

In its obviousness analysis for claim 1, Petitioner maps Nadeau’s Service Logic Controller (SLC) to the recited “call routing controller.” Pet. 18–19 (citing Ex. 1005, 2:49–52; 7:22–23; 11:33–12:65, Figs. 1–4). According to Petitioner, Nadeau’s SLC manages communications sessions between callers and called parties using telephones, PCs, a Detection Point Functional Element (DPFE), and a gateway, which Petitioner maps collectively to the “plurality of nodes.” *Id.* (citing Ex. 1003 ¶¶ 205–209; Ex. 1005, 6:58–8:6; 8:45–9:7, Figs. 1, 3, 4).

For initiating a call, Petitioner cites Nadeau’s teaching on originating a call through an Automatic Call Setup (ACS service) using an Internet Originating Point Functional Element (OPFE), such as a multimedia PC. *Id.*

at 20–21 (citing Ex. 1005, 6:58–65). Petitioner contends that, after a “caller enters ‘the name of the person to call’ into a VoIP client,” the SLC receives the caller’s home phone number (i.e., “a caller identifier”) and the name of the person to reach (i.e., “a callee identifier”). *Id.* at 21 (citing Ex. 1005, 12:34–38, 12:42–47). For “locating a caller dialing profile,” Petitioner contends Nadeau’s SLC consults a caller’s service profile in a Subscriber Database, which includes a subscriber ID and directory entries for callees. *Id.* at 21–23 (citing Ex. 1005, 3:56–65, 4:2–6, 7:24–27, 7:34–40, 9:18–23, 9:55–10:20, 12:48–52). Petitioner likens the subscriber ID to “a username associated with the caller” and the contents of the callee directory entries, such as name or telephone number and routing information, to the “calling attributes.” *Id.*

Regarding the “determining a match” limitation, Petitioner contends Nadeau’s “SLC uses a callee’s name (callee identifier) to locate a directory entry for the callee in the caller profile.” *Id.* at 23–24 (citing Ex. 1003 ¶¶ 219–222; Ex. 1005, 4:3–6, 10:1–2, 11:13–15, 12:42–52). For “classifying the call,” Petitioner contends that the SLC determines where to route a call based on “routing information in a matched directory entry for the callee in the caller’s profile.” *Id.* at 24–25 (citing Ex. 1005, 7:24–27, 10:8–20, 11:27–30). Petitioner cites Nadeau’s teachings on routing a call to the public switched telephone network (PTSN) based on a least cost routing rule or a priority list in a subscriber record as being associated with classifying a call as a public network call. *Id.* at 26 (citing Ex. 1005, 10:11, 10:15–18). Petitioner also cites Nadeau’s teachings on routing a call over an IP network based on an available IP address for the callee or Quality of Service flag in a subscriber record as being associated with classifying a call

as a private network call. *Id.* at 25 (citing Ex. 1005, 7:24–27, 10:8–20, 11:27–30). Supported by testimony from Mr. Bress, Petitioner contends an ordinarily skilled artisan would have known that “an IP network includes private networks like intranets and local area networks (LANs).” *Id.* at 26 (citing Ex. 1003 ¶ 227; Ex. 1009, 6–44). Petitioner further cites Kelly for teaching that an IP network includes private networks like intranets and LANs. *Id.* (citing Ex. 1006, 2:30–41). Petitioner contends an ordinarily skilled artisan would have modified Nadeau’s IP network to include intranets and LANs based on Kelly because it is a combination of known elements according to known methods that would yield predictable results. *Id.* (citing Ex. 1003 ¶ 228).

For “producing a private network routing message,” Petitioner contends Nadeau’s “SLC generates and sends ‘routing instructions’ (private network routing message) to a detection point (‘DPFE’) or Internet ACS Gateway (collectively a call controller).” *Id.* at 26–27 (citing Ex. 1003 ¶¶ 234–235; Ex. 1005, 7:22–23, 12:55–61). Petitioner explains “the routing instructions instruct the DPFE to route the call to an IP address of the callee.” *Id.* at 27 (citing Ex. 1005, 12:55–61). Regarding the routing message “identifying an address, on the private network, associated with the callee,” Petitioner acknowledges that Nadeau “does not explicitly disclose that the routing instructions identify the callees’ IP address,” but Petitioner contends this would have been obvious based on Nadeau’s teachings that the network is an IP network and that the SLC returns “a message indicating to route the call to the IP address retrieved from the Internet domain’ . . . , which is the callees’ IP address.” *Id.* at 27–28 (quoting Ex. 1005, 12:55–61 and citing Ex. 1003 ¶¶ 237–238; Ex. 1005, 11:27) (emphasis omitted).

Petitioner explains that an ordinarily skilled artisan would have known that an IP address is used to route calls in an IP network. *Id.* at 28 (citing Ex. 1003 ¶¶ 237–238). Petitioner further contends that, in light of Kelly, an ordinarily skilled artisan would have known to modify the programming of Nadeau’s SLC so that the callee’s IP address was included in the routing instructions. *Id.* (citing Ex. 1003 ¶ 241; Ex. 1006, 7:56–8:1). Petitioner characterizes this modification as being a known technique yielding predictable results that “allows a call to be routed to the callee’s IP address . . . which is the same result desired by *Nadeau*.” *Id.* (citing Ex. 1003 ¶ 241; Ex. 1005, 10:3, 12:55–61; Ex. 1006, 7:59–67). Petitioner also contends it would have been obvious for an ordinarily skilled artisan to try this technique based on similar reasons. *Id.* at 28–29 (citing Ex. 1003 ¶ 242; Ex. 1005, 7:5–9, 7:22–23, 11:27–28, 12:55–61; Ex. 1006, 7:64–67).

For “producing a public network routing message,” Petitioner again relies on Nadeau’s SLC purportedly sending “routing instructions.” *Id.* at 29–30 (citing Ex. 1005, 7:5–9, 7:22–23). Petitioner contends that, to route an IP-originated call over the PSTN, “the routing instructions instruct the DPFE and Internet ACS Gateway to route the call to an IP-PSTN Gateway, also known as a Gateway Functional Element (GWFE).” *Id.* at 30 (citing Ex. 1005, 7:5–9, 8:39–42, 11:29–33). Regarding the routing message “identifying a gateway to the public network,” Petitioner acknowledges that Nadeau “does not explicitly state that the routing instructions identify the IP-PSTN Gateway to which the call is routed,” but Petitioner contends an ordinarily skilled artisan would have known “that the routing instructions must include such an identification to complete the call.” *Id.* (citing Ex. 1003 ¶¶ 251–252). Petitioner also contends that, in light of Kelly, an

ordinarily skilled artisan would have known to modify Nadeau's SLC to perform the gateway selection process of Kelly by "produc[ing] routing instructions that identify the IP-PSTN Gateway by including its IP address." *Id.* (citing Ex. 1003 ¶¶ 202–204, 244–254; Ex. 1006, 12:32–35, 12:55–57, 13:22–26).

Petitioner contends Nadeau and Kelly are from the same field of endeavor and are both concerned with reducing the cost for making VoIP calls. *Id.* at 16 (citing Ex. 1005, 1:53–2:9, 6:30, 10:11–16; Ex. 1006, 2:42–3:19, 13:46–57). Petitioner notes that Nadeau's SLC may determine to route a call over the PSTN based on least cost routing, but that Nadeau "includes only one gateway to route the call to the PSTN, so the cost for PSTN routing is controlled by that gateway alone." *Id.* at 16–17 (citing Ex. 1005, 7:5–9, 7:22–23, 8:39–40, 10:11–16, 11:27–28, Fig. 1). Correspondingly, Petitioner contends that Kelly "recognizes that costs may be further reduced by selecting a gateway that provides lower cost routing compared to other gateways." *Id.* at 17 (citing Ex. 1006, 13:39–57). In light of this, Petitioner contends an ordinarily skilled artisan "would have been motivated to modify the SLC of *Nadeau* to perform the gateway selection process taught in *Kelly* to further reduce the cost of routing over the PSTN as recognized by *Kelly*." *Id.* (citing Ex. 1003 ¶ 202).

b. Patent Owner's Arguments

Patent Owner argues that the only "routing instructions" disclosed by Nadeau relative to the "public network" consist of "simply a directory number (DN)." Prelim. Resp. 18 (citing Ex. 1005, 9:20–23). Accordingly, Patent Owner argues "Nadeau does not disclose that anything identifying the

IP-PSTN Gateway is required for Internet-to-PSTN routing.” *Id.* Patent Owner further criticizes Petitioner’s assertion that Nadeau’s routing instructions “must include” an identification of a gateway to the public network. *See id.* at 19–23 (citing Pet. 30). Patent Owner characterizes this as an assertion of inherency, and Patent Owner contends Petitioner has not established that Nadeau’s routing instructions necessarily identify a gateway. *See id.* Patent Owner contends Petitioner’s assertion is supported only by Mr. Bress’s testimony, which Patent Owner disputes. *See id.* at 21–23. For example, in response to Mr. Bress’s testimony that Nadeau’s DPFE and ACS Gateway would need an IP address to route a PSTN call (*see* Ex. 1003 ¶¶ 251–252), Patent Owner posits a counterexample in which there is only one IP-PSTN Gateway preconfigured to receive all “public” calls. Prelim. Resp. 22.

Regarding Petitioner’s proposed modification of Nadeau with Kelly, Patent Owner contends Petitioner has failed to “consider[] or describ[e] various significant further modifications of the SLC that would be necessary in order for the combined references to actually perform” the public network limitation. Prelim. Resp. 24. For example, Patent Owner contends “Petitioner has not provided guidance regarding how merely programming Nadeau’s SLC to produce the call packet of Kelly . . . would result in the SLC ‘producing a public network routing message.’” *Id.* at 26.

In particular, Patent Owner highlights a potential inconsistency in Petitioner’s proposed combination. Patent Owner notes that Petitioner maps collectively Nadeau’s Internet ACS Detection Point/DFPE 114 and Internet ACS gateway 116 to the recited “call controller.” *Id.* at 29 (citing Pet. 30). Patent Owner further notes Nadeau teaches that ACS Service Logic

Controller 122 provides “routing instructions,” which Petitioner maps to the recited “network routing message,” to Internet ACS Detection Point/DFPE 114. *Id.* at 14 (citing Pet. 29–30), 27 (citing Ex. 1005, 7:1–12, 9:38–46, 11:27–32). Patent Owner notes Internet ACS Detection Point/DFPE 114—the place where Nadeau’s SLC 122 sends routing instructions—is a VoIP client. *Id.* at 10 (citing Ex. 1005, 12:34–39), 27. Patent Owner then turns to Petitioner’s cited teachings from Kelly and alleges inconsistencies between Kelly and Nadeau. Specifically, Patent Owner notes that Petitioner considers Kelly’s “call packet” to be analogous to the “routing instructions” of Nadeau. *Id.* (citing Pet. 17). Patent Owner contends “the call packet in Kelly is configured to be sent to an IP-PSTN gateway, not a VoIP client device” as with Nadeau’s routing instructions. *Id.* at 30 (citing Ex. 1006, 13:22–26, 15:12–17). As such, Patent Owner contends additional modifications of the references would be necessary to teach the “public network routing message for receipt by the call controller.” *Id.* at 30–33. Patent Owner further contends “Kelly does not disclose that the contents of the call packet include the IP address of the gateway.” *Id.* at 31 (citing Ex. 1006, 13:22–26, 15:12–17).

c. *Petitioner’s Proposed Combination Does Not Teach a “public network routing message identifying a gateway to the public network”*

We are persuaded by Patent Owner’s arguments, because Petitioner has not established that the combination of Nadeau and Kelly teaches a “public network routing message identifying a gateway to the public network” that is “for receipt by the call controller.” At the outset, we note Petitioner acknowledges that Nadeau does not explicitly disclose routing

instructions that identify a gateway to the public network. Pet. 30.

Although Petitioner contends “routing instructions *must* include such an identification to complete the call” (*id.* (citing Ex. 1003 ¶¶ 251–252) (emphasis added)), Petitioner’s evidence does not establish this.

First, Patent Owner is correct (Prelim. Resp. 22) that the only “routing information” described in Nadeau that is applicable to public calls is “the individual’s directory number (DN) for the PSTN.” Ex. 1005, 9:20–23.

Second, Petitioner relies on dubious logic from Mr. Bress, who testifies that, “[b]ecause *Nadeau* discloses that routing is occurring in an IP network, one of ordinary skill in the art would know that, an IP address is used to identify the IP-PSTN Gateway.” Ex. 1003 ¶ 252; *see also* Pet. 30 (citing same).

Even if this is true, it does not substantiate that Nadeau’s routing instructions must include the IP address of the gateway. As pointed out by Patent Owner, Mr. Bress “has not established that the caller’s VoIP client can only receive the gateway identification information from the SLC 122 and that the caller’s VoIP client can only receive this information from the routing instructions.” Prelim. Resp. 22. Further, Patent Owner is correct that identification of Nadeau’s lone gateway “could be preconfigured into the caller’s VoIP client.” *Id.* Accordingly, we are not persuaded that Nadeau’s routing instruction must identify the gateway.

Because Nadeau does not teach a “public network routing message . . . identifying a gateway to the public network,” Petitioner relies on Kelly. *See* Pet. 30 (citing Ex. 1006, 12:32–35, 12:55–57, 13:22–26). Yet even if Nadeau’s routing instructions are modified to include the contents of Kelly’s call packet, the combination does not teach that the modified routing instructions identify a public network gateway. Specifically, Petitioner

proposes programming Nadeau's SLC to "perform the gateway selection process taught by Kelly." *Id.* at 17–18. According to Petitioner, Kelly's gateway selection process:

(1) transforms a dialed telephone number (e.g., 1-561-997-4001) into a hybrid telephone number domain name (e.g., 4001-997561-1.carrier.com) . . . ; (2) uses successive portions of the hybrid telephone number domain name to retrieve references to name servers that contain an IP address of a carrier gateway . . . ; and (3) produces a call packet, analogous to routing instructions, containing the hybrid telephone number domain name and the IP address of the carrier gateway to effect the call.

Id. at 17 (citing Ex. 1006, 11:54–12:11, 12:32–57, 13:21–26). We do not agree with Petitioner's characterization of part (3), however, because Kelly's call packet actually contains the "entire telephone number domain name entry" (e.g., "4001.997.561.1.carrier.com"). Ex. 1006, 13:22–26. In contrast, the example provided in Kelly states that the "IP address of the desired gateway" is "997.561.1.carrier.com."¹ *Id.* at 12:53–57. Although a call packet with the "entire telephone number domain name entry" is *sent to* the IP address of the gateway, *id.* at 13:22–26, this does not mean that the

¹ To the extent Petitioner and Mr. Bress cite column 12, lines 55–57 of Kelly for the proposition that "the IP address of the desired gateway . . . is then forwarded via Internet 220 and ISP 250 to WebPhone client 232 by name server 254 in step 12" (Pet. 29; Ex. 1003 ¶ 253 (emphasis omitted)), this teaching relates to "a recursive process" by name server 254 for "resolving the telephone number domain name previously entered into the WebPhone client to the appropriate IP address of a gateway on a PSTN." Ex. 1006, 12:32–35. Once resolved, the IP address of the gateway is forwarded from name server 254 to WebPhone client 232. *Id.* at 12:55–57. As such, the forwarded gateway IP address is not part of Kelly's call packet that is cited by Petitioner.

gateway IP address necessarily is part of the call packet. As stated above with respect to Nadeau, we do not agree with Petitioner’s argument (*see, e.g.,* Pet. 30 (citing Ex. 1003 ¶¶ 251–252)) that the IP address of the gateway must be part of the call packet simply because the call packet is sent to that IP address. Nor does Petitioner provide any explanation as to why the “entire telephone number domain name entry” in Kelly’s call packet identifies a gateway to the public network commensurate with the language of claim 1.² Therefore, Petitioner has not established that Kelly’s call packet identifies a public network gateway.

For these reasons, Petitioner’s proffered evidence does not establish that the combination of Nadeau and Kelly teaches “producing a public network routing message for receipt by the call controller, said public network routing message identifying a gateway to the public network,” as recited in claim 1.

d. Petitioner’s Rationale for Combining Kelly with Nadeau is Flawed

Even assuming, *arguendo*, that Petitioner’s evidence established that Nadeau’s routing instructions—as modified by Kelly’s call packet—identify a public network gateway, Petitioner’s proposed combination has further problems. We agree with Patent Owner that Petitioner’s stated rationale for combining the references is flawed. First, Patent Owner is correct that the “*Nadeau-Kelly* combination is an artificial construct which extracts selected

² To the extent Petitioner is relying on this argument, it has failed to “identif[y], in writing and with particularity . . . the grounds on which the challenge . . . is based.” 35 U.S.C. § 312(a)(3).

teachings of Kelly out of their original context in Kelly’s system (e.g., a VoIP *client* device) and transplants them into a completely different context in Nadeau’s system (e.g., an SLC *server*.” Prelim. Resp. 54. Although Petitioner contends that modifying Nadeau’s SLC “would simply involve the known technique of programming the SLC to perform the gateway selection process taught by *Kelly*” (Pet. 18 (citing Ex. 1003 ¶ 203)), Petitioner’s asserted combination results in methods from Kelly’s VoIP client (WebPhone client 232) being applied to a different type of element, namely, Nadeau’s Service Logic Controller 122, rather than Nadeau’s VoIP client 114. *See* Pet. 17–18. This inconsistency undercuts Mr. Bress’s testimony that the modification uses “a known technique . . . *to improve similar devices . . . in the same way.*” Ex. 1003 ¶ 203 (emphasis added). Furthermore, we agree with Patent Owner that Petitioner has failed to provide “any explanation for why a gateway selection process that Kelly discloses as operating as a *client application* with interactive user features on a VoIP *client* device, would be transplanted by a[n ordinarily skilled artisan] to an SLC *server* in Nadeau.” Prelim. Resp. 55–56. In the absence of an explanation, we are not persuaded by Petitioner’s assertion (Pet. 18) that the combination is “merely a combination of prior art elements according to known methods.”

Second, we agree with Patent Owner that Nadeau’s Internet ACS Detection Point/DFPE 114, which is a VoIP client, is not programmed to process the contents of Kelly’s call packet. *See* Prelim. Resp. 61. Petitioner’s combination relies on Nadeau’s SLC producing that call packet, and Petitioner contends the call packet includes “the hybrid telephone number domain name and the IP address of the carrier gateway to effect the

call.”³ Pet. 16–17 (citing Ex. 1006, 13:21–26). Petitioner maps the call packet to the routing instructions that are sent to Nadeau’s “DPFE or Internet ACS Gateway,” i.e., Nadeau’s VoIP client 114. *Id.* at 29–30 (citing Ex. 1005, 7:5–9, 7:22–23). Yet the only “routing instructions” expected by Nadeau’s VoIP client 114 relative to public network calls consist of only a directory number (DN). *See* Ex. 1005, 9:20–23. Petitioner does not provide any explanation about how Nadeau’s VoIP client could process a call packet containing a different type of routing instructions—namely, Kelly’s “entire telephone number domain name entry.” *See* Ex. 1006, 13:22–26. Nor does Petitioner propose any modification to Nadeau’s VoIP client to effect such processing. Thus, even if Nadeau’s VoIP client might be a familiar item with obvious uses beyond its primary purpose as set forth in Nadeau, *see KSR*, 550 U.S. at 420, Petitioner has not explained as much.

Third, Petitioner does not address the “[i]nformation on how to complete the call” that Nadeau’s SLC 112 sends directly to the IP-PSTN Gateway 124 for cross-domain calls. *See* Ex. 1005, 11:31–33, 12:13–15, 13:34–41, Figs. 1, 3, 4 (arrow between elements 122 and 124). We agree with Patent Owner (Prelim. Resp. 61) that Petitioner has not stated how Nadeau’s SLC would be reprogrammed in a combination where “[i]nformation on how to complete the call” could be sent to any of multiple gateways, rather than the lone gateway 124 of Nadeau. Such details, lacking here, are necessary to support a conclusion that one of ordinary skill in the

³ As stated above, the call packet actually includes the “entire telephone number domain name entry” (e.g., “4001.997.561.1.carrier.com”). Ex. 1006, 13:22–26.

art would have had reasonable expectation of success in combining Nadeau and Kelly in the way asserted by Petitioner.

In the context of this case, we find inadequate Petitioner's reasoning that an ordinarily skilled artisan would have known to implement the Nadeau-Kelly combination via a simple reprogramming of Nadeau's SLC. Thus, we determine that Petitioner's stated rationale for combining Nadeau and Kelly is fatally flawed.

e. Conclusion Regarding Claim 1

For the reasons above, Petitioner has not established a reasonable likelihood that it would prevail in showing claim 1 would have been obvious over the combination of Nadeau and Kelly.

4. Claims 7, 27, 54, 72–74, and 92

Like claim 1, independent claims 27, 54, and 74 each require the production of a public network routing message that identifies a gateway to the public network. Petitioner relies on the same analysis from claim 1 for these limitations. *See* Pet. 31–39. Petitioner likewise relies on the same rationale for combining Kelly with Nadeau. *See id.* at 16–18. Therefore, for the same reasons mentioned with respect to claim 1, Petitioner has not established a reasonable likelihood that it would prevail in showing claims 27, 54, and 74 would have been obvious over the combination of Nadeau and Kelly.

Claim 7 depends from claim 1; claims 72 and 73 depend from claim 54; and claim 92 depends from claim 74. Petitioner's analyses of these dependent claims do not cure the deficiencies noted above with respect

to the independent claims. *See id.* at 30–31, 34–35, 39. Therefore, for the same reasons mentioned with respect to claim 1, Petitioner has not established a reasonable likelihood that it would prevail in showing claims 7, 72, 73, and 92 would have been obvious over the combination of Nadeau and Kelly.

B. Obviousness Ground Based on Nadeau, Kelly, and Vaziri

Petitioner contends claims 28, 34, 93, and 111 would have been obvious over Nadeau, Kelly, and Vaziri. Pet. 40–76. Patent Owner disputes Petitioner’s contention. Prelim. Resp. 14–62.

Similar to claim 1, each of independent claims 28 and 93 recites means for producing a public network routing message that identifies a gateway to the public network. Petitioner’s analyses for these limitations are similar to the corresponding limitation in claim 1. *See* Pet. 35–39, 65–71, 73–74. Petitioner’s cited teachings from Vaziri do not cure the deficiencies noted above with respect to claim 1. In addition, Petitioner’s rationale for combining Vaziri with Nadeau and Kelly incorporates the same rationale for combining Kelly with Nadeau that we found deficient with respect to claim 1. *See id.* at 40. Therefore, for the same reasons mentioned with respect to claim 1, Petitioner has not established a reasonable likelihood that it would prevail in showing claims 28 and 93 would have been obvious over the combination of Nadeau, Kelly, and Vaziri.

Claim 34 depends from claim 28, and claim 111 depends from claim 93. Petitioner’s analyses of these dependent claims, including their citations to Vaziri, do not cure the deficiencies noted above with respect to the independent claims. *See id.* at 71–73, 75–76. Therefore, for the same

reasons mentioned with respect to claim 1, Petitioner has not established a reasonable likelihood that it would prevail in showing claims 34 and 111 would have been obvious over the combination of Nadeau, Kelly, and Vaziri.

III. CONCLUSION

Petitioner has not demonstrated a reasonable likelihood of prevailing with respect to at least one claim of the '815 patent challenged in the Petition. Therefore, we do not institute an *inter partes* review as to any of the challenged claims.

IV. ORDER

Accordingly, it is:

ORDERED that the Petition is *denied* as to all challenged claims of the '815 patent.

IPR2017-01382
Patent 8,542,815 B2

PETITIONER:

BAKER BOTTS LLP

Samir A. Bhavsar
Brian Johnston
Charles Yeh

samir.bhavsar@bakerbotts.com
brian.johnson@bakerbotts.com
charles.yeh@bakerbotts.com

PATENT OWNER:

KNOBBE, MARTENS, OLSON & BEAR, LLP

Kerry Taylor
John M. Carson

2kst@knobbe.com
2jmc@knobbe.com
BoxDigifonica@knobbe.com