

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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UNIFIED PATENTS INC.,  
Petitioner,

v.

VOIP-PAL.COM INC.,  
Patent Owner.

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Case IPR2016-01082  
Patent 8,542,815 B2

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Before BARBARA A. BENOIT, LYNNE E. PETTIGREW, and  
STACY B. MARGOLIES, *Administrative Patent Judges*.

MARGOLIES, *Administrative Patent Judge*.

DECISION  
Denying Institution of *Inter Partes* Review  
*37 C.F.R. § 42.108*

I. INTRODUCTION

Unified Patents Inc. (“Petitioner”) filed a Petition for *inter partes* review of claims 1, 2, 7, 27–29, 34, 54, 72–74, 92, 93, and 111 of U.S. Patent No. 8,542,815 B2 (Ex. 1001, “the ’815 patent”). Paper 1 (“Pet.”). Voip-Pal.com, Inc. (“Patent Owner”) filed a Preliminary Response. Paper 6

(“Prelim. Resp.”). Institution of an *inter partes* review is authorized by statute when “the information presented in the petition . . . and any response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a); *see* 37 C.F.R. § 42.108. Upon consideration of the Petition and the Preliminary Response, we conclude that the information presented does not show a reasonable likelihood that Petitioner would prevail in establishing the unpatentability of any of claims 1, 2, 7, 27–29, 34, 54, 72–74, 92, 93, and 111 of the ’815 patent.

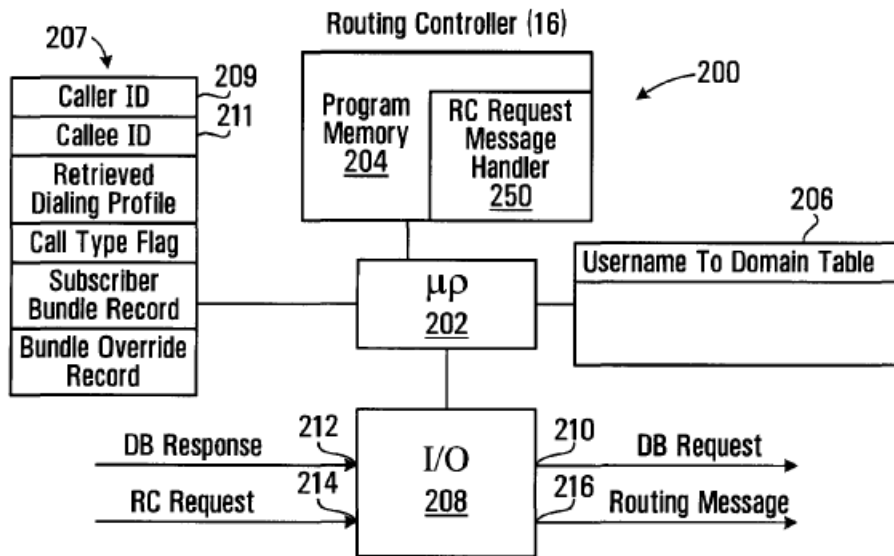
#### *A. Related Matters*

The parties identify the following district court proceedings in which the ’815 patent has been asserted: *Voip-Pal.com, Inc. v. Verizon Wireless Services, LLC*, Case No. 2-16-cv-00271 (D. Nev.), and *Voip-Pal.com, Inc. v. Apple, Inc.*, Case No. 2-16-cv-00260 (D. Nev.). *See* Pet. 4; Paper 4, 2.

Another petitioner—Apple Inc.—has filed a petition for *inter partes* review of claims of the ’815 patent in IPR2016-01201, and a petition for *inter partes* review of claims of U.S. Patent No. 9,179,005—a continuation of the ’815 patent—in IPR2016-001198.

#### *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, shown below, illustrates a routing controller that facilitates communication between callers and callees:



**FIG. 7**

*Id.* at Fig. 7, 14:24–25, 17:16–17. As shown in Figure 7, above, 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.

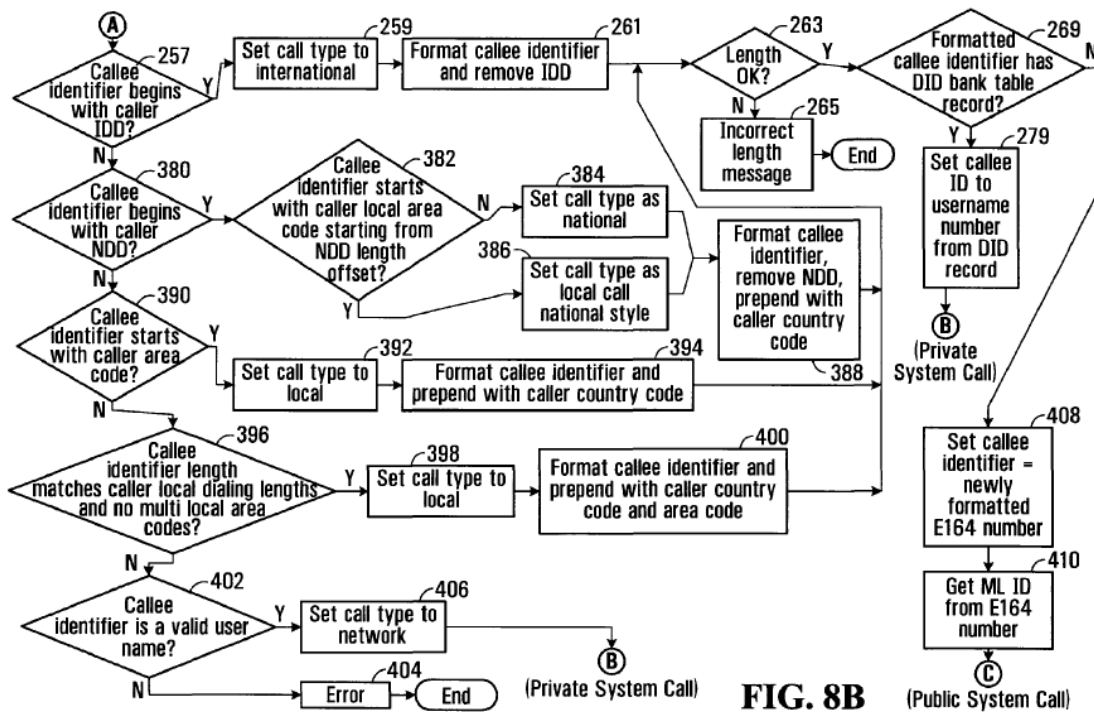
According to the '815 patent, in response to a calling subscriber initiating a call, the routing controller:

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, shown below, illustrates steps for performing checks on the callee identifier:



**FIG. 8B** (Private System Call) (Public System Call)

*Id.* at Fig. 8B, 19:45–49. Blocks 257, 380, 390, 396, 402 in Figure 8B above 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 22:51–60. 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*

Among the challenged claims, claims 1, 27, 28, 54, 74, and 93 are independent. Claim 1 is illustrative and reads:

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. Asserted Grounds of Unpatentability*

Petitioner contends that claims 1, 2, 7, 27–29, 34, 54, 72–74, 92, 93, and 111 of the '815 patent are unpatentable based on the following specific grounds (Pet. 5, 15–61):

Reference(s)	Basis	Challenged Claims
Turner <sup>1</sup>	35 U.S.C. § 102(e)	1, 2, 7, 27–29, 34, 54, 72–74, 92, 93, and 111
Turner and Kaczmarczyk <sup>2</sup>	35 U.S.C. § 103(a)	1, 2, 7, 27–29, 34, 54, 72–74, 92, 93, and 111

In its analysis, Petitioner relies on the declaration testimony of Dr. Michael Caloyannides (Ex. 1002). Pet. 15–20, 34–40.

II. DISCUSSION

*A. Claim Construction*

In an *inter partes* review, we construe claim terms in an unexpired patent according to their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (upholding the use of the broadest reasonable interpretation standard). Consistent with the broadest reasonable construction, claim terms are presumed to have their ordinary and customary meaning as understood by a person of ordinary skill in the art in the context of the entire patent disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). An inventor may provide a meaning for a term that is different from

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<sup>1</sup> U.S. Patent No. 7,218,722 B1, filed Dec. 18, 2000 (Ex. 1003, “Turner”).

<sup>2</sup> U.S. Patent No. 6,961,334 B1, issued Nov. 1, 2005 (Ex. 1004, “Kaczmarczyk”).

its ordinary meaning by defining the term in the specification with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

Petitioner proposes constructions for various claim terms. Pet. 10–15. For purposes of this decision, we determine that no claim terms require express construction.

### *B. Asserted Anticipation by Turner*

Petitioner contends that claims 1, 2, 7, 27–29, 34, 54, 72–74, 92, 93, and 111 are unpatentable under 35 U.S.C. § 102(e) as anticipated by Turner. Pet. 5, 15–34. Relying on the testimony of Dr. Caloyannides, Petitioner purportedly explains how Turner discloses each claim limitation. *Id.* at 15–34 (citing Ex. 1002).

#### *1. Summary of Turner*

Turner discloses a system for providing call management services in a Virtual Private Network using Voice or Video over Internet Protocol. Ex. 1003, 1:10–12. Turner describes allowing users of the private network continued use of a conventional circuit-switched voice transport network, such as the Public Switched Telephone Network (PSTN), to guarantee the Quality of Service that Virtual Private Network users have come to expect. *Id.* at 2:29–34.

Figure 1 of Turner, shown below, illustrates a network topology of the system:

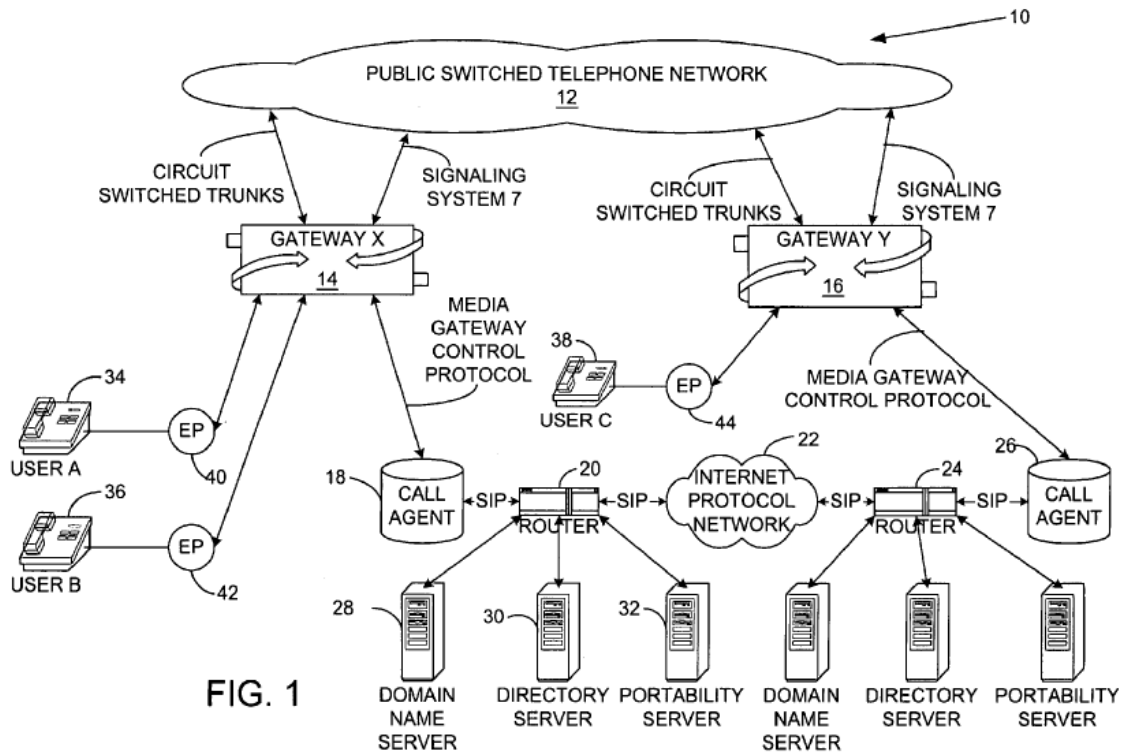
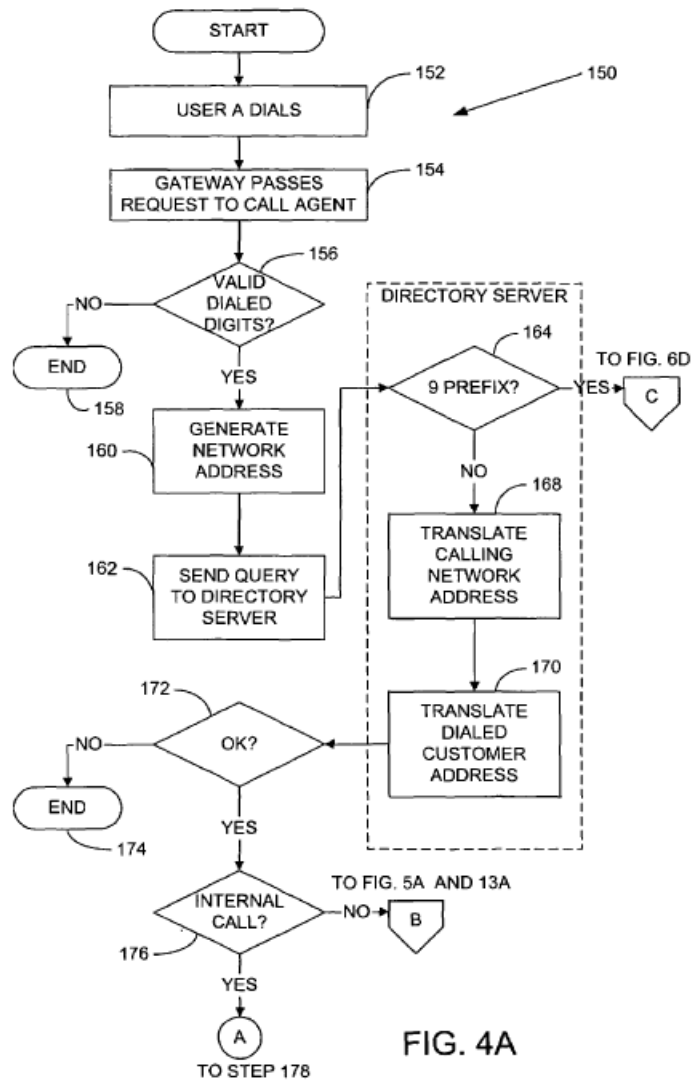


FIG. 1

As illustrated in Figure 1 above, Internet Protocol (IP) Gateway X 14 serves user A 34 and user B 36, and IP Gateway Y 16 serves user C 38. *Id.* at 4:61–63. Turner discloses that an IP signaling protocol such as Session Initiation Protocol (SIP) handles communications between call agents 18 and 26 in gateways 14 and 16, respectively, via managed IP network 22. *Id.* at 5:5–8. PSTN 12 is also a call routing option for calls between the users. *Id.* at 4:39–44.

Figures 4A and 4B of Turner illustrate a flowchart for handling intra-gateway calls. *Id.* at 9:13–15. Figure 4A is shown below:





*Id.* at 9:13–15. As illustrated in Figure 4A above and according to an example described in Turner, user A dials 2002 to reach user B per step 152. *Id.* at 9:15–17. A call agent associated with user A, also known as the originating call agent, receives the Customer Address (CA) (e.g., 2002) and assigns a Network Address (NA) (e.g., 313-555-2002) in step 160. *Id.* at 9:17–22. The Directory Server converts the dialed CA (2002) to the NA (313-555-2002) per step 170. *Id.* at 9:24–28. At step 176, the originating call agent recognizes that the called party is within the gateway. *Id.* at 9:30–

33. According to Turner, “[t]his is a major decision point, leading either to a process that can be completed internally or one that involves interaction with a call agent at another gateway.” *Id.* at 9:33–36. Figure 4B, below, illustrates additional steps once it is determined, per step 176, that the call can be completed internally:

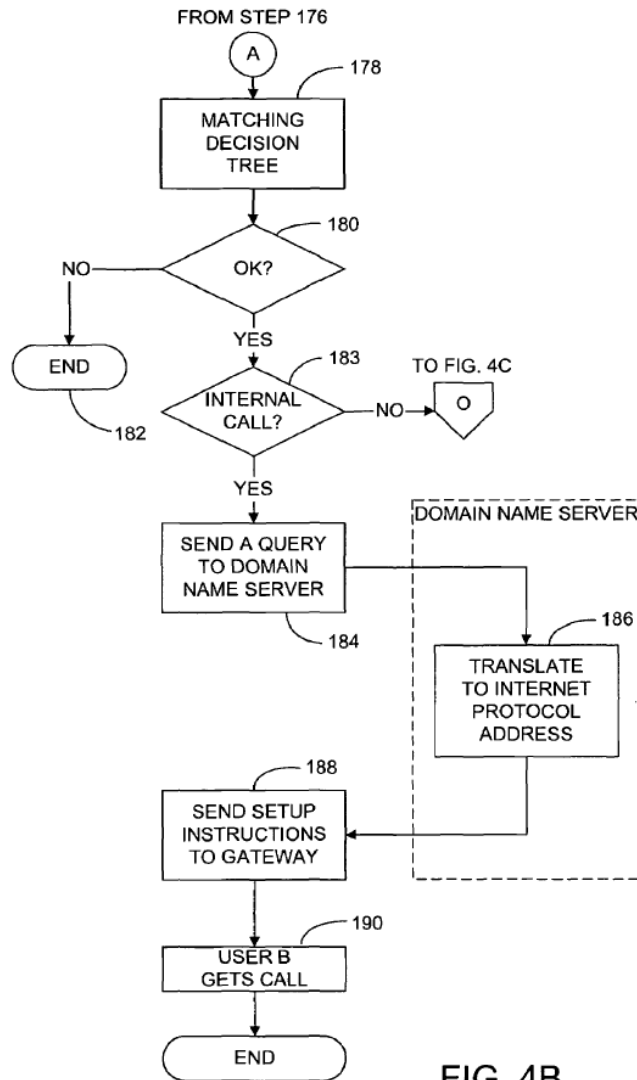


FIG. 4B

Figure 4B, above, illustrates that, having decided to proceed internally, the call agent negotiates the Matching Decision Tree per step 178, which involves matching the preferences and privileges of the two parties and returning an appropriate NA. *Id.* at 9:37–43. If the call is approved per



Figure 4C, above, illustrates the handling of calls when the Matching Decision Tree has identified an external destination, either in the PSTN or in another customer's Virtual Private Network. *Id.* at 9:57–60. For example, step 192 determines whether the destination is a PSTN destination, and if so, the call agent instructs the trunk gateway to set up the call, per step 193. *Id.* at 9:60–63.

Referring again to step 176 of Figure 4A above, Turner discloses that if the call is not an intra-gateway call, the steps proceed to those illustrated in Figure 5A below:

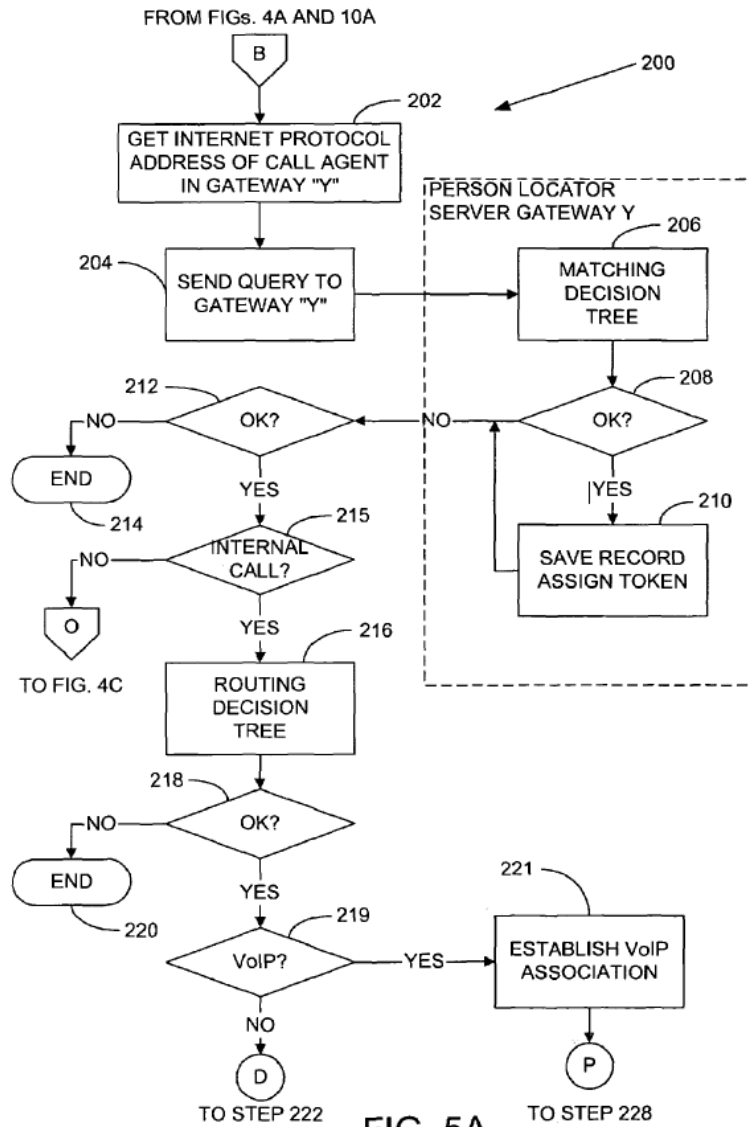


Figure 5A, above, illustrates steps for handling inter-gateway calls. *Id.* at 10:25–27. Turner describes an example in which user A on IP gateway X dials 3001 to reach user C on IP gateway Y. *Id.* at 10:28–30. The call agent associated with user A receives the CA (e.g., 3001) and assigns an NA (e.g., 313-555-2001) as the caller’s identity. *Id.* at 10:30–33. The Directory Server converts the CA (3001) to, for example, 709-555-3001. *Id.* at 10:33–35. The originating call agent recognizes that “the called party is within the private network, but at a location of gateway ‘X’.” *Id.* at

10:36–38. Turner again describes this step (step 176 in Figure 4A) as “a major decision point,” in which, in this example, the call agent recognizes that “709-5555” is associated with gateway Y. *Id.* at 10:39–42. The steps proceed as illustrated in Figure 5A, including determining—per step 215 (like step 183 in Figure 4A)—that the destination is still internal—and ultimately establishing a VoIP association, per step 221. *Id.* at 11:42–44, Fig. 5A.

In a section called “External Call Handling,” Turner discloses that “CAs cannot begin with digits ‘8’, ‘9’, or ‘0’, these being reserved for private trunk network access, escape to the PSTN, and attendant services, respectively.” *Id.* at 12:44–47. According to an example in Turner, user A dials a PSTN number, 9-313-555-7860. *Id.* at 12:53–56. Per step 162 of Figure 4A, the Directory Server recognizes the escape code of “9” and declines to translate the dialed number. *Id.* at 12:58–61. The call agent ultimately requests trunk gateway X to set up a call to the PSTN. *Id.* at 12:64–65; *see also id.* at Fig. 6D.

## 2. Analysis

Petitioner characterizes Turner as disclosing that “[c]alling and called parties can be located on private networks such as Internet Protocol networks connected to a gateway, or on public networks such as a PSTN.” Pet. 15; *see also* Pet. 16 (labeling portions of Turner Figure 1 as “Public Network” and “Private Network”). Petitioner contends, among other things, that Turner discloses that based on an analysis of the NA and/or CA of the caller and the callee, as well as stored information associated with the NA and CA, a call agent determines whether the callee is within the same gateway as the caller and can be processed internally, “such as a private

network call,” and determines whether the call is directed to a callee on another gateway, “such as a public network call.” *Id.* at 18. Thus, according to Petitioner, Turner’s call agent classifies the call as a private network call or a public network call. *Id.* Petitioner also argues that Turner’s Directory Server analyzes the called address to identify codes or digits “that are associated with the caller as being numbers for ‘private trunk network access’ or ‘escape to the PSTN.’” *Id.*

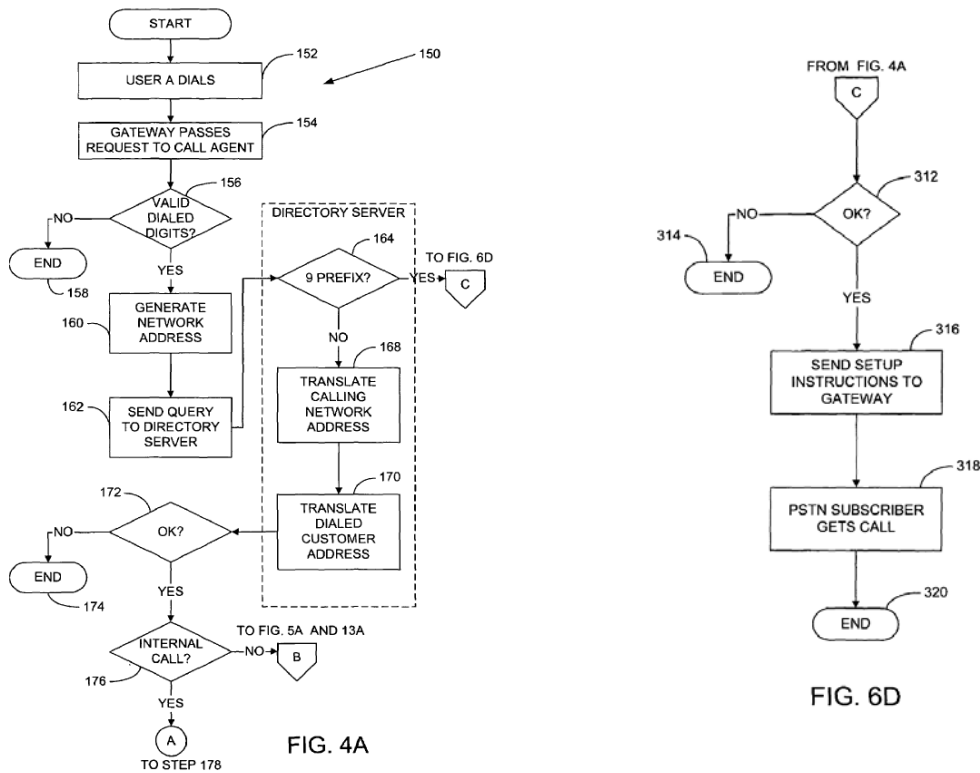
*a. Claim 1: determining a match*

Petitioner contends that Turner discloses the step of claim 1 of “determining a match when at least one of said calling attributes matches at least a portion of said callee identifier” by disclosing that the call agent analyzes a caller address, callee address, and information about the addresses such as associated network locations to determine whether the caller and callee are connected to the same gateway or in the same location. Pet. 24. Petitioner specifically relies on decision step 176 of Figure 4A of Turner, which determines whether the caller and callee are located in the same gateway. *See* Pet. 17–18, 24; Ex. 1003, 9:24–36, 10:25–48. Petitioner also relies on decision step 366 of Figure 7B of Turner, which is part of the Matching Decision Tree process (block 178 of Fig. 4B) and determines whether the caller and callee are located in the same business unit (after determining in step 176 that the two are in the same gateway). *See* Pet. 24–25; Ex. 1003, 15:33–34, 16:51–57, 17:9–12. For the reasons explained below in connection with the classifying step, even if Turner’s step 176 or step 366 discloses the claimed “determining a match,” we determine that Petitioner does not sufficiently show on the current record that Turner discloses the claimed classifying the call as a public network call when “said

match” meets public network classification criteria, wherein “said match” is the match determined by step 176 of Figure 4A or step 366 of Figure 7B.

Petitioner alternatively contends that Turner discloses the claimed determining a match by disclosing that the Directory Server analyzes the called address to identify “codes or digits that are associated with the caller” as numbers for private trunk network access or escape to the PSTN.

Pet. 18–19; *see also id.* at 25–26. Petitioner relies on Turner’s disclosure at column 12, lines 44 through 67, describing external call handling, and an example illustrated in Figures 4A and 6D below:



*See* Pet. 18–19, 25–26; Ex. 1003, 12:44–67. As shown above, at step 164 of Figure 4A, if the Directory Server determines that the network address contains the prefix 9, the steps proceed to those shown in Figure 6D, above, to set up a call to the PSTN. Ex. 1003, 12:51–67.



Patent Owner argues, among other things, that the predefined prefixes in Turner (i.e., “8” for private trunk network access, “9” for escape to the PSTN, and “0” for attendant services) are not “calling attributes associated with the caller,” as required by claim 1. Prelim. Resp. 43–45.

We determine that Petitioner fails to show, based on its contention involving analysis of the digits indicative of private trunk network access or escape to the PSTN, that Turner discloses “determining a match when at least one of said calling attributes matches at least a portion of said callee identifier.” According to the claim, “said calling attributes” are attributes “associated with the caller.” Ex. 1001, 36:20–25. The prefixes in Turner, however, are not associated with the caller. We agree with Patent Owner that the passage in Turner on which Petitioner relies (column 12, lines 44 through 67) does not describe the prefix digits as calling attributes associated with the caller and that Turner does not disclose that a user profile object includes predefined prefix digits. *See* Prelim. Resp. 43–44; Ex. 1003, 12:44–67, 7:29–61, Fig. 3. Petitioner thus fails to provide sufficient evidence in support of its conclusory statement on page 18 of the Petition that the digits are “associated with the caller.”

*b. Claim 1: classifying the call*

Petitioner contends that Turner discloses the step of claim 1 of “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” because Turner’s call agent determines whether the call is an internal call such as a call within an IP network on a single gateway or an external call that uses the PSTN. Pet. 26. Petitioner relies on three different decision points in

Turner in support of its contention: (i) step 176 of Figure 4A (*id.* at 18, 27 (citing Ex. 1003, 9:30–36)); (ii) step 192 of Figure 4C (*id.* at 26 (citing Ex. 1003, 9:57–63)); and (iii) external call handling for reserved digits 8, 9, and 0 (*id.* at 26–27 (citing Ex. 1003, 12:44–67)). Based on the information presented, Petitioner fails to show sufficiently that Turner discloses the classifying limitation under any of these theories.

First, step 176 of Figure 4A step determines whether a call *within a private network* is intra-gateway or inter-gateway. Ex. 1003, 9:13–15, 9:30–36, 10:25–28, 10:36–42. This step does not involve “classifying the call as a public network call when said match meets public network classification criteria,” as required by the claim.<sup>3</sup>

Second, Petitioner fails to show sufficiently that step 192 involves classifying the call as a public network call when “said match” meets public network classification criteria and as a private network call when “said match” meets private network classification criteria. As discussed above in connection with the “determining a match” limitation, the claimed match must be when at least one of said calling attributes matches at least a portion of said callee identifier. Step 192—determining whether a number is a PSTN number—is not based on a match between a calling attribute (i.e., an attribute associated with the caller) and a portion of the callee identifier.

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<sup>3</sup> Petitioner does not rely on the other internal match Petitioner identifies in connection with the “determining a match” limitation—step 366 of Figure 4B—in support of the “classifying” limitation. *Compare* Pet. 24, *with* Pet. 26–27. Even so, step 366—which is directed to determining whether the calling and called user are in the same unit (after determining they are served by the same gateway in the private network)—does not involve classifying a call as a public network call when the match meets public network classification criteria. *See* Ex. 1003, 17:9–12, Figs. 4A, 4B, 7B.

Third, with respect to the handling of reserved digits, those digits are not calling attributes associated with the caller and thus, as explained above, under this theory, Petitioner has not shown that Turner discloses the “determining a match” limitation of claim 1. For the same reason, Petitioner fails to show sufficiently that the “said match” element of the classifying step is met.

For the foregoing reasons, Petitioner fails to show sufficiently that Turner discloses the classifying step of claim 1.

*c. Conclusion*

For the above reasons, Petitioner has not shown sufficiently that Turner discloses all of the limitations of independent claim 1. Petitioner relies on its analysis of claim 1 for similar limitations in the other challenged independent claims (claims 27, 28, 54, 74, and 93). Pet. 30–34. Accordingly, we determine that the information presented does not show a reasonable likelihood that Petitioner would prevail in demonstrating that any of claims 1, 2, 7, 27–29, 34, 54, 72–74, 92, 93, and 111 are unpatentable under 35 U.S.C. § 102(e) as anticipated by Turner.

*C. Asserted Obviousness over Turner and Kaczmarczyk*

Petitioner also contends that claims 1, 2, 7, 27–29, 34, 54, 72–74, 92, 93, and 111 of the ’815 patent are unpatentable under 35 U.S.C. § 103(a) as obvious over Turner and Kaczmarczyk. Pet. 5, 34–56. Relying on the testimony of Dr. Caloyannides, Petitioner explains how the references allegedly teach or suggest the claim limitations and provides purported reasoning for combining the teachings of the references. *Id.* at 34–56 (citing Ex. 1002).

### *1. Summary of Kaczmarczyk*

Kaczmarczyk discloses a call routing and signaling system for providing connectivity between a PSTN and an IP network. Ex. 1004, 5:56–62, Fig. 1. Kaczmarczyk discloses that a call control engine and a route intelligence engine “determine the route the call should take. In particular, [a] resource manager informs [the] intelligence engine of the available trunks over which a call may be routed in response to call processing by [a] call control engine, and [the] intelligence engine selects the route accordingly.” *Id.* at 8:35–40 (reference numerals omitted); *see also id.* at 7:38–40 (stating that the “[i]ntelligence engine determines what route the call will take” (reference numeral omitted)). Figure 4A of Kaczmarczyk illustrates a process flow for calls to the PSTN, and Figure 4B illustrates a process flow for calls to the IP network. *Id.* at 4:50–53, 9:53–60, 11:61–63.

### *2. Analysis*

Petitioner contends that Kaczmarczyk discloses routing calls from a private network to a public network, and vice versa. Pet. 37. Petitioner argues that Kaczmarczyk is silent regarding routing calls in a private network, such as calls between individuals within an IP network. *Id.* Petitioner maintains that Turner cures the deficiencies of Kaczmarczyk “because Turner discloses the additional techniques of determining that a call is directed to a party within the same (i.e. private) network, and routing the call to the private network recipient.” Pet. 37 (emphasis omitted).

As with its anticipation ground, Petitioner contends that Turner’s call agent classifies the call as a private network call or a public network call. Pet. 38. Petitioner relies on the same analysis of Turner for the classifying step in support of its obviousness ground as it relies on for its anticipation

ground. *Compare* Pet. 46–47, *with* Pet. 26–27. Petitioner also relies on Kaczmarczyk for disclosing “determining services available to the caller, using the call type and call attributes to select an appropriate route list, and sending the call to the intelligence engine.” Pet. 45.

As explained above, Petitioner has not sufficiently shown that Turner discloses the classifying step of claim 1. Petitioner relies on the same disclosures in Turner that it relies on in support of the anticipation ground, which we find insufficient for the reasons explained above. Pet. 46–47. Petitioner also fails to show sufficiently that Kaczmarczyk discloses this limitation. Petitioner vaguely states that Kaczmarczyk discloses “selecting an appropriate route list,” but Petitioner does not sufficiently explain whether, or how, any passage in Kaczmarczyk specifically discloses classifying a call as a private network call or classifying a call as a public network call based on matching particular criteria as claimed. *See* Pet. 36–37, 45–46. We agree with Patent Owner, based on the information presented, that Kaczmarczyk describes choosing routing paths once it is already known that the destination is a private network or PSTN. *See* Prelim. Resp. 52–55, 61–66; Ex. 1004, 6:18–20, 6:30–36, 9:53–59, 10:36–38, 10:46–49, 11:61–64, Figs. 4A, 4B. Petitioner fails to explain, for example, how the cited descriptions in Kaczmarczyk disclose “classifying the call as a public network call when said match meets public network classification criteria,” as required by claim 1. Petitioner thus fails to show sufficiently that the combined teachings of Turner and Kaczmarczyk teach the classifying step of claim 1.

For at least the foregoing reasons, we determine that the information presented does not show a reasonable likelihood that Petitioner would

prevail in establishing that the subject matter of claims 1, 2, 7, 27–29, 34, 54, 72–74, 92, 93, and 111 would have been obvious over the combination of Turner and Kaczmarczyk.

### III. CONCLUSION

For the above reasons, we determine that the information presented does not establish a reasonable likelihood that Petitioner would prevail in showing that claims 1, 2, 7, 27–29, 34, 54, 72–74, 92, 93, and 111 of the '815 patent are unpatentable on the grounds asserted in the Petition.

### IV. ORDER

Accordingly, it is:

ORDERED that the Petition is denied as to all challenged claims, and no trial is instituted.

IPR2016-01082  
Patent 8,542,815 B2

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