

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CISCO SYSTEMS, INC.,
Petitioner,

v.

CROGA INNOVATIONS LTD.,
Patent Owner.

IPR2024-01282
Patent 7,738,368 B2

Before TERRENCE W. McMILLIN, JOHN R. KENNY, and
RUSSELL E. CASS, *Administrative Patent Judges*.

KENNY, *Administrative Patent Judge*.

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

I. INTRODUCTION

Cisco Systems, Inc. (“Petitioner”) filed a Petition to institute an *inter partes* review of claims 1 and 2 (the “challenged claims”) of U.S. Patent No. 7,738,368 B2 (Ex. 1001, the “’368 patent,” “challenged patent”) pursuant to 35 U.S.C. § 311 *et seq.* Paper 2 (“Pet.”). Croga Innovations Ltd. (“Patent Owner”) filed a Preliminary Response. Paper 6 (“Prelim. Resp.”).

Patent Owner’s Preliminary Response does not specifically address the merits of Petitioner’s challenges to patentability for any claim limitation or Petitioner’s proposed combination of references. *See generally* Prelim. Resp. The only issue raised in the Preliminary Response is discretionary denial in light of a parallel district court case. *Id.* The Preliminary Response addresses whether the Petition sets forth a compelling case of unpatentability as part of its analysis of discretionary denial.

The Petition, to justify institution of review, must demonstrate a reasonable likelihood that Petitioner would prevail with respect to at least one challenged claim. 35 U.S.C. § 314(a) (2018). After considering the Petition, the Preliminary Response, and the evidence of record, we determine that the Petition has met this standard. Further, we decline to discretionarily deny *inter partes* review. Therefore, we institute an *inter partes* review of the challenged claims of the ’368 patent.

A. Related Litigation

The parties identify the following district court litigation as involving the ’368 patent:

Croga Innovations Ltd. v. Cisco Systems, Inc., 2:24-cv-00065-JRG (E.D. Tex.) (“Related Litigation”).

Pet. 95; Paper 5, 2; Prelim. Resp. 3.

B. Challenged Patent

The '368 patent “relates to voice over internet protocol (‘VoIP’) telephone systems” and discloses systems “for changing the coder-decoder utilized during a voice over Internet protocol telephone call.” Ex. 1001, 1:5–8, code (57).

The '368 patent explains that VoIP applications are often deployed across a broad network infrastructure including local area networks (“LAN”), and wide area networks (“WAN”) that serve to connect the LANs to each other. Ex. 1001, 1:10–20. Thus, quality and reliability of VoIP depends on the underlying networks’ capabilities and limitations. *Id.* When the available bandwidth of the WAN is reduced such that the bandwidth remaining is inadequate to transmit a VoIP telephone call, the '368 patent notes that “previous solutions would simply prevent any new VoIP telephone calls from being placed.” *Id.* at 1:20–27. According to the '368 patent, “there exists a need for a system that can allow additional VoIP telephone calls to be placed when the available bandwidth of the WAN is reduced below a desired level.” *Id.*

To this end, the '368 patent discloses embodiments of VoIP telephone systems employing call control gatekeepers that instruct (based on a call quality signal) VoIP telephones to renegotiate a telephone call and change a coder-decoder (“codec”) of the VoIP telephone call. Ex. 1001, 1:50–53, 1:64–2:3. Figure 1 of the '368 patent, reproduced below, illustrates a VoIP telephone system including call control gatekeepers. *Id.* at 1:30–32, 2:41–44.

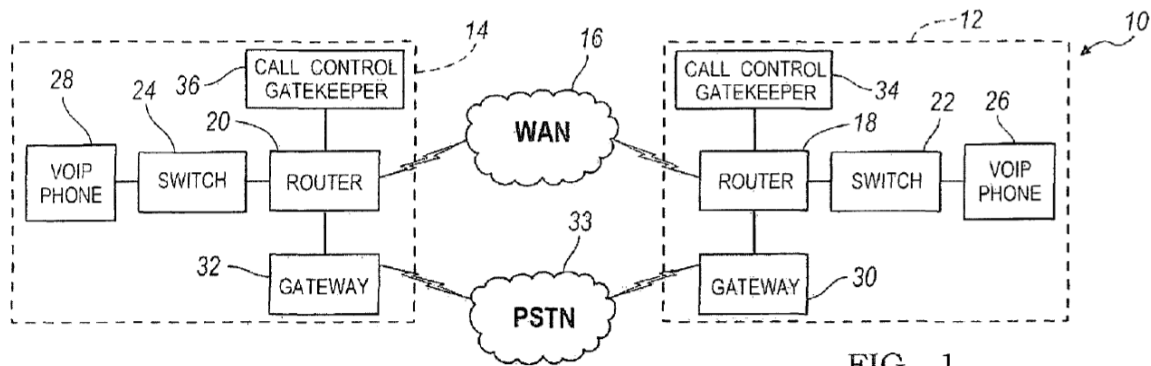


FIG. 1

Figure 1 illustrates a VoIP telephone system 10 including call control gatekeepers 34 and 36. *Id.* at 1:30–32, 2:41–44.

VoIP telephone system 10 illustrated in Figure 1 includes a first LAN 12, a second LAN 14 (which communicates with first LAN 12 via a WAN 16), VoIP telephones 26 and 28, gateway devices 30 and 32 (providing access to a public switched telephone network (“PSTN”)), and call control gatekeepers 34 and 36. Ex. 1001, Fig. 1. VoIP telephones 26, 28 are connected to routers 18 and 22, and eventually to WAN 16. *Id.* at 2:50–53. Call control gatekeepers function to direct incoming voice packets to the proper VoIP telephone. *Id.* at 2:61–67. Call control gatekeepers 34 and 36 also provide assistance in adjusting a codec used during a VoIP telephone call between VoIP telephones 26 and 28. *Id.*

More particularly, when making a VoIP telephone call between VoIP telephones 26 and 28, a codec is utilized to convert the voice of the caller to a digital signal. Ex. 1001, 3:1–24. Various codecs enable sampling the analog voice of the caller at various sampling rates. *Id.* When sampling at a higher rate, the quality of the voice heard by the listener of a VoIP telephone is superior, however, using a codec with a higher sampling rate requires a greater bandwidth to effectively transmit calls between VoIP telephones. *Id.*

Gatekeepers 34 and 36 are configured to receive a call quality signal from their respective VoIP telephone 26 and 28. Ex. 1001, 3:58–60. A determination indicating low call quality indicates that the available bandwidth is limited. *Id.* at 3:29–32. One way to determine call quality is to measure the number of dropped voice packets over a given time period. *Id.* at 3:41–44. When one of call control gatekeepers 34 and 36 receives a call quality signal indicating that voice packets are being dropped, call control gatekeeper 34 or 36 will instruct VoIP telephone 26/28 to renegotiate the call with the other VoIP telephone 26/28 and select a codec with a lower sampling rate. *Id.* at 3:58–65. By utilizing a lower bandwidth codec, the amount of available bandwidth increases. *Id.* at 3:37–41. By increasing the available bandwidth, more data, including additional VoIP telephone calls can be transmitted. *Id.*

Figures 3 and 4 of the '368 patent, reproduced below, illustrate additional embodiments of VoIP telephone systems having a second WAN connection (Figure 3) or a VoIP service provider (Figure 4). Ex. 1001, 1:35–39.

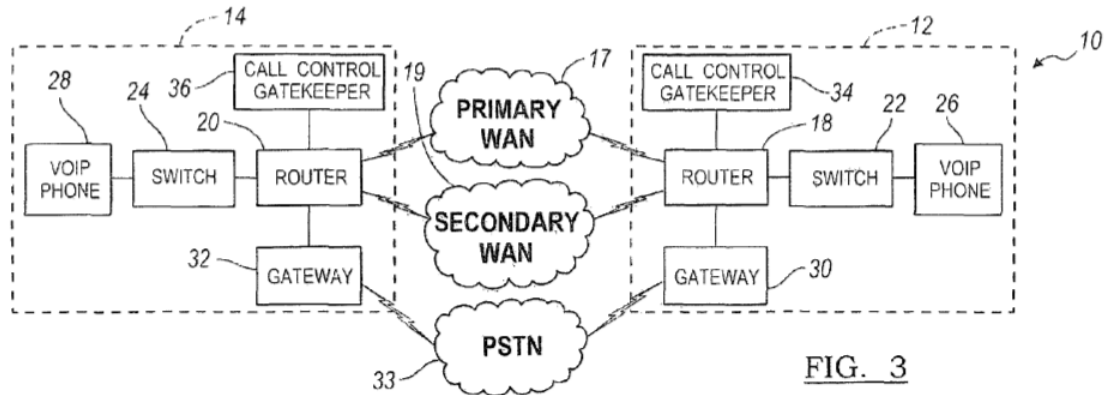


FIG. 3

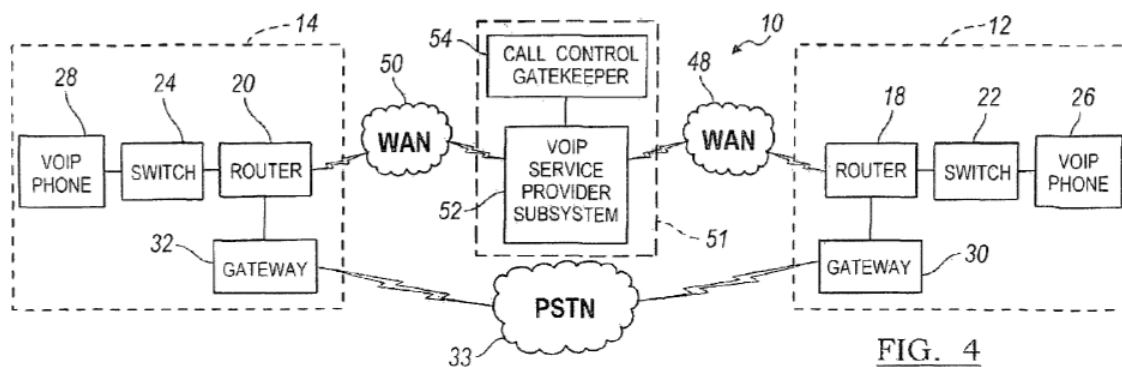


FIG. 4

Figure 3 illustrates a VoIP telephone system 10 having call control gatekeepers 34 and 36, and Figure 4 illustrates a VoIP telephone system 10 having call control gatekeeper 54. *Id.* at Figs 3–4.

In Figure 3, a primary WAN 17 functions to provide communications between first LAN 12 and second LAN 14, and a backup WAN 19 functions to provide a backup line of communication between first LAN 12 and second LAN 14. *Id.* at 4:30–41. If primary WAN 17 becomes inoperable, backup WAN 19 is utilized to provide a limited bandwidth communication line between LANs 14 and 16. *Id.* Call control gatekeepers 34 and 36 detect when primary WAN 17 becomes inoperative. *Id.* at 4:47–55. In the event that primary WAN 17 becomes inoperative, one of call control gatekeepers 34 and 36 can indicate to their VoIP telephone 26 and 28 that primary WAN is inoperative. *Id.* Once VoIP telephones 26 and 28 have been informed that

primary WAN 17 is inoperative, VoIP telephones 26 and 28 negotiate the telephone call using a lower bandwidth codec. *Id.*

In Figure 4, first and second LANs 12 and 14 are connected to a first and second WANs 48 and 50, respectively. Ex. 1001, 4:56–65. VoIP telephones 26 and 28 communicate to each other via VoIP service provider system 52 through first WAN 58 and second WAN 50. *Id.* The VoIP service provider system includes a VoIP service provider subsystem 42, and a call control gatekeeper 54 is connected to VoIP service provider subsystem 52. *Id.* at 4:66–5:4. Call control gatekeeper 54 functions to instruct service provider subsystem 42 to direct VoIP telephone calls to the intended VoIP telephone. *Id.* Call control gatekeeper 54 is configured to receive a signal from either of VoIP telephones 26 and 28 indicating that voice packets are being dropped. *Id.* at 5:10–15. When call control gatekeeper 54 receives this signal, call control gatekeeper 54 instructs VoIP telephones 26 and 28 to renegotiate the VoIP telephone calls and utilize a lower bandwidth codec. *Id.*

C. Challenged Claims

Petitioner challenges claims 1 and 2. Pet. 11. Claims 1 and 2 are independent and read:

- 1.¹ [1.0] A system comprising:
 - [1.1] a VoIP service provider system having a call control gatekeeper, a first interface and a second interface;
 - [1.2] the first interface connected to a first LAN having an interface to a first VoIP telephone;
 - [1.3] the second interface connected to a second LAN having an interface to a second VoIP telephone;

¹ For ease of reference, we include the bracketed designations provided in the Petition for the preambles and limitations of claims 1 and 2 (*see* Pet. 97–98 (Claims Appendix)).

- [1.4] the first and second VoIP telephones being configured to communicate using a first codec;
 - [1.5.1] the call control gatekeeper configured to receive a call quality signal from the first VoIP telephone and
[1.5.2] send an adjustment signal based on the call quality signal to the first and second VoIP telephones instructing the first and second VoIP telephones to communicate using a second codec; and
 - [1.6] wherein the adjustment signal based on the call quality signal is sent to the first and second VoIP telephones during a telephone call between the first and second VoIP telephones.
2. [2.0] A system comprising:
- [2.1] a VoIP service provider system having a call control gatekeeper, a first interface and a second interface;
 - [2.2] the first interface connected to a first LAN having an interface to a first VoIP telephone;
 - [2.3] the second interface connected to a second LAN having an interface to a second VoIP telephone;
 - [2.4] the first and second VoIP telephones being configured to communicate using a first codec;
 - [2.5.1] the call control gatekeeper configured to receive a call quality signal from the first VoIP telephone and
[2.5.2] send an adjustment signal based on the call quality signal to the first and second VoIP telephones instructing the first and second VoIP telephones to communicate using a second codec; and
 - [2.6] wherein the call quality signal is based upon a number of dropped voice packets during a VoIP telephone call.

Ex. 1001, 8:32–67.

D. Asserted Challenges to Patentability and Prior Art

Petitioner challenges claims 1 and 2 based on the grounds in the table below:

Ground	Claim(s) Challenged	35 U.S.C. § ²	Reference(s)
1	1, 2	103	Minhazuddin, ³ Hepworth, ⁴ Shaffer ⁵
2	1, 2	103	Mundra, ⁶ RFC3435, ⁷ RFC3660 ⁸

Pet. 20.

Petitioner submits a declaration with proffered expert testimony from Dr. Henry Houh (Ex. 1003). At this stage, Patent Owner has not submitted any declaration.

II. LEVEL OF SKILL AND CLAIM CONSTRUCTION

A. Level of Skill in the Art

Factors pertinent to determining the level of ordinary skill in the art include (1) the educational level of the inventor; (2) the type of problems

² The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), amended 35 U.S.C. §§ 102 and 103, effective March 16, 2013.

³ U.S. Patent 7,643,414 B1, issued January 5, 2010 (Ex. 1005).

⁴ U.S. Patent Publication No. 2004/0073690 A1, published April 15, 2004 (Ex. 1006).

⁵ U.S. Patent 7,023,839 B1, issued April 4, 2006 (Ex. 1007).

⁶ U.S. Patent Publication No. 2004/0032860 A1, published February 19, 2004 (Ex. 1008).

⁷ F. Andreassen, et al., “*Media Gateway Control Protocol (MGCP) Version 1.0*,” Request for Comments: 3435, Network Working Group, The Internet Society, January 2003 (Ex. 1027).

⁸ B. Foster, et al., “*Basic Media Gateway Control Protocol (MGCP) Packages*,” Request for Comments: 3660, Network Working Group, The Internet Society, December 2003 (Ex. 1028).

encountered in the art; (3) prior-art solutions to those problems; (4) the rapidity with which innovations are made; (5) the sophistication of the technology; and (6) the educational level of workers active in the field. *Env'tl. Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 696–97 (Fed. Cir. 1983). Not all factors may exist in every case, and one or more of these or other factors may predominate in a particular case. *Id.* These factors are not exhaustive, but merely a guide to determining the level of ordinary skill in the art. *Daiichi Sankyo Co. v. Apotex, Inc.*, 501 F.3d 1254, 1256 (Fed. Cir. 2007). Moreover, the prior art itself may reflect an appropriate skill level. *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

Petitioner asserts that an ordinarily skilled artisan at the time of the alleged invention

would have been someone knowledgeable and familiar with the then-extant packet-based communication network techniques and VoIP technologies. Ex.1003 ¶¶ 27, 34–50. That person would have a bachelor's degree in computer science, computer engineering, electrical engineering, or equivalent training, and approximately two years of experience working in the field of network communications, including experience with VoIP. Lack of work experience can be remedied by additional education, and vice versa. Ex.1003 ¶¶ 26–28.

Pet. 14.

Patent Owner does not challenge Petitioner's proposed level of ordinary skill in the art. *See generally* Prelim. Resp.

For purposes of this Decision, we adopt Petitioner's proposed definition of a person of ordinary skill in the pertinent art, as it is consistent with the '368 patent and the asserted prior art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

B. Claim Construction

Petitioner submits that “for the purposes of this proceeding and the grounds presented herein, no claim term requires express construction.” Pet. 14–15. At this stage of this proceeding, Patent Owner does not address claim construction. *See generally* Prelim. Resp.

For this Decision, we do not need to expressly construe any claim terms to resolve the parties’ dispute.⁹ *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (“[W]e need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy.’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

III. ANALYSIS OF ASSERTED GROUNDS

A. Ground 1: Asserted Obviousness over Minhazuddin, Hepworth, and Shaffer

Petitioner argues that claims 1 and 2 would have been obvious over the combination of Minhazuddin, Hepworth, and Shaffer. Pet. 20.

1. Minhazuddin

Minhazuddin is titled “WAN Keeper Efficient Bandwidth Management,” and relates “generally to bandwidth management and specifically to bandwidth management in packet-switched networks.” Ex. 1005, codes (54), 1:5–8. Minhazuddin discloses “a call admission controller” that is operable to, *inter alia*, perform call admission control by

⁹ If either party contends that explicit claim construction is necessary in order to make a final determination whether or not any challenged claim is unpatentable based on the arguments and evidence presented, it should clearly explain why during trial and provide a clear and unambiguous construction with supporting evidence including specifically identifying the challenges, claims, and limitations to which the construction is necessary.

controlling bandwidth utilization through varying codecs to efficiently utilize limited bandwidth resources. *Id.* at 3:59–63, code (57). Minhazuddin's Figure 1, reproduced below, illustrates a communications network including a gatekeeper for performing dynamic call admission control. *Id.* at 4:26–28, 5:4–10.

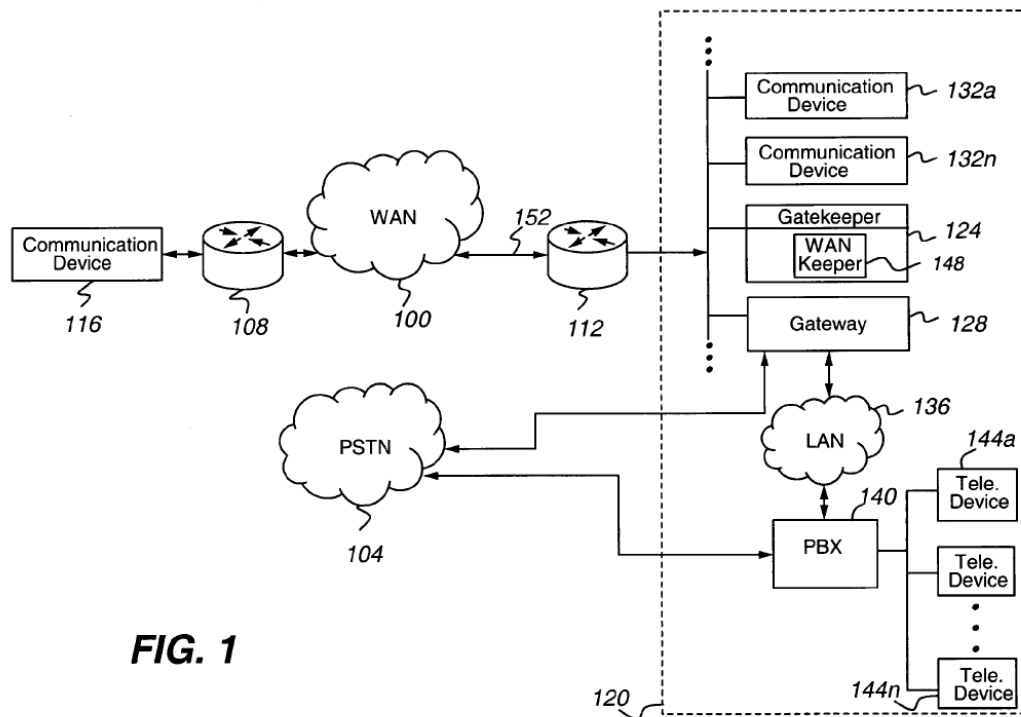


Figure 1 illustrates a communications network including a gatekeeper 124 for performing dynamic call admission control. *Id.* at 4:26–28, 5:4–10.

The communications network illustrated in Figure 1 includes a packet-switched Wide Area Network (WAN) 100, a circuit-switched network 104, local edge routers 108 and 112, packet-switched communication device 116, and enterprise network 120. *Ex.* 1005, 4:38–56. Enterprise network 120 includes a gatekeeper 124, a gateway 128, packet switched communication devices 132a-n, a Local Area Network (LAN) 136, a Private Branch Exchange (PBX) 140, and telecommunication devices 144a-n. *Id.* Packet-

switched communication devices 116 and 132*a-n* are communication devices for live voice communications, such as IP hardphones, IP Softphones, Personal Digital Assistants, 802.11 wireless phones, and GSM/802.11 cellular phones. *Id.* at 4:64–5:3. Gateway 128 is an electronic signal repeater and protocol converter allowing access into and out of circuit-switched or packet-switched networks. *Id.* at 5:12–15. PBX 140 is a telecommunications switch. *Id.* at 5:24–25. Telecommunication devices 144*a-n* are analog or digital telephones. *Id.* at 5:36–39.

Gatekeeper 124 provides a variety of functions, including call set-up, call control, authentication, authorization, accounting, and address mapping or lookup, translation and resolution services. Ex. 1005, 5:4–11. Gatekeeper 124 includes a WAN keeper 148 to perform dynamic call admission control. *Id.* WAN keeper 148 performs dynamic call admission control by determining, based on measured QoS (Quality of Service) metrics and/or available (unused) bandwidth in the link 152 extending from local edge router 112 to the next (nonlocal) router in the first WAN hop and/or in the various links between gatekeeper 124 and destination communication device 116, whether or not the call can be placed using any codec. *Id.* at 5:40–52. If the call can be placed, WAN keeper 148 selects the appropriate codec from among a number of possible codecs for the call. *Id.* For a given call placement request, WAN keeper 148 seeks to use the codec providing the highest voice or audio quality while using no more than the maximum available bandwidth. *Id.* WAN keeper 148 varies the particular codec algorithm used depending on the leftover or unused bandwidth and/or the anticipated impact on the state of the network. *Id.* at 6:16–33.

WAN keeper 148 periodically monitors WAN link bandwidth utilization and end-to-end network QoS metrics. Ex. 1005, 6:34–42. Each polling period, WAN keeper 148 checks to see if the utilization has crossed any codec usage thresholds, and then decides on what codec should be handed out to future outgoing VoIP calls. *Id.* The decision represents the codec with the highest utilization threshold that has been crossed. *Id.* WAN keeper 148 instructs media gateway 128 to change the VoIP codec being used currently. *Id.*

Minhazuddin's Figure 2, reproduced below, illustrates a method of operation of the WAN keeper. Ex. 1005, 6:43–45.

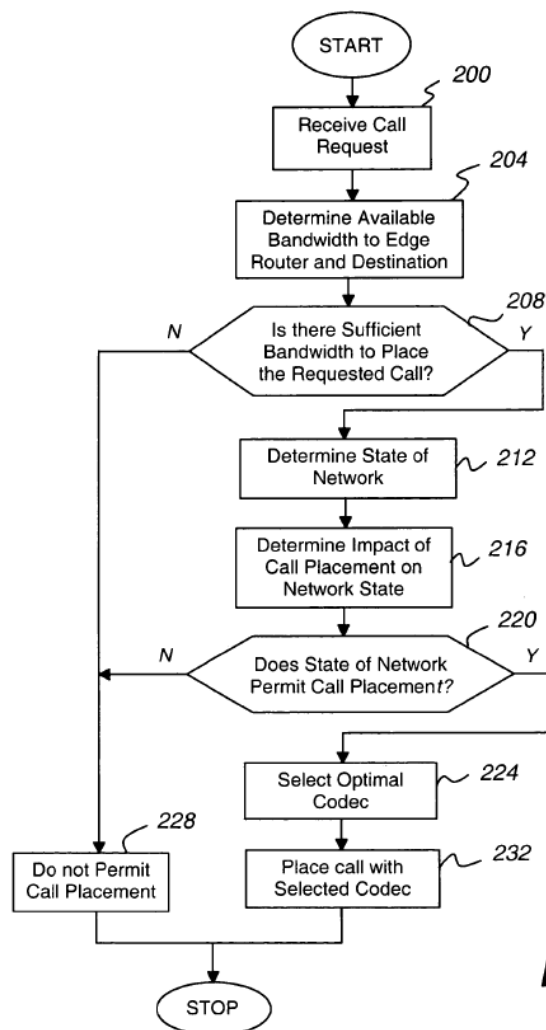


FIG. 2

Figure 2 illustrates a method of operation of the WAN keeper.
Id. at 6:43–45.

As shown in Figure 2, WAN keeper 148 receives a call initiation request as part of the setup of a call (step 200), WAN keeper 148 determines the available bandwidth in the WAN link 152 from edge router 112 and between gatekeeper 124 and destination communication device 116 (step 204), and WAN keeper 148 then determines whether or not there is sufficient bandwidth to place the requested call (decision step 208). Ex. 1005, 6:48–7:7. When there is not sufficient bandwidth for the requested call, WAN keeper 148 proceeds to step 228 and does not permit the call to be placed. *Id.* at 7:37–40. When there is sufficient bandwidth for the requested call, WAN keeper 148 proceeds to step 212 in which WAN keeper 148 determines the state of the network. *Id.* at 7:41–45. This is done by determining one or more selected QoS parameters other than bandwidth. *Id.*

In step 216, the collected QoS parameters are adjusted for the selected codec for the call. Ex. 1005, 7:46–50. In decision step 220, WAN keeper 148 determines if the adjusted metrics are acceptable in view of the VoIP requirements or in view of selected thresholds. *Id.* at 7:52–62. If not, WAN keeper 148 selects the codec having the next lower bandwidth requirement and repeats step 216 for that codec. *Id.* The process is repeated until an acceptable codec is identified. *Id.* If no codec can be identified, WAN keeper 148 proceeds to step 228. *Id.* If a codec is identified, WAN keeper 148 proceeds to step 224 and selects that codec as the codec to be used in negotiating with the other endpoint. *Id.* In step 224, the call is permitted to proceed with the selected codec. *Id.* at 7:64–67.

Minhazuddin's Figure 4, reproduced below, illustrates a second method of operation of the WAN keeper. Ex. 1005, 4:33–35.

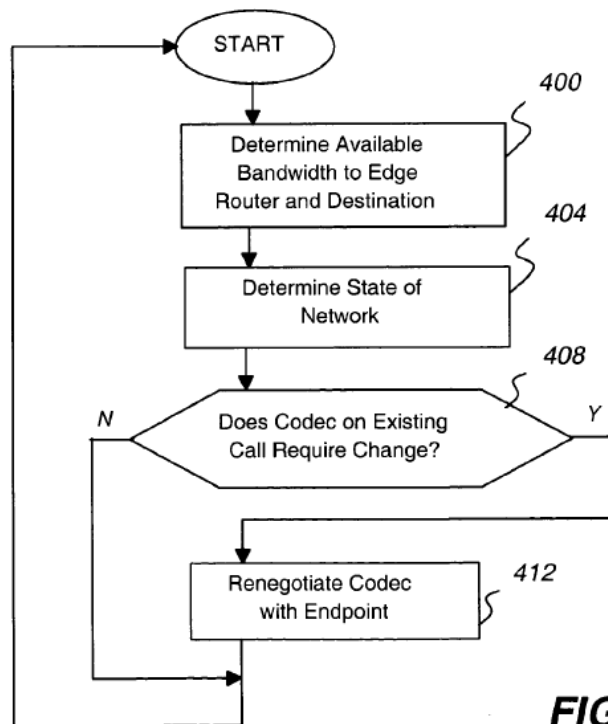


FIG. 4

Figure 4 illustrates a second method of operation of the WAN keeper. *Id.* at 4:33–35.

In Figure 4, WAN keeper 148 periodically polls the edge router interface for bandwidth utilization statistics. Ex. 1005, 8:8–14. When the utilization is above a maximum threshold, WAN keeper 148 will immediately take measures to block all further outgoing calls and/or use different, lower bit rate codecs on existing calls to reduce bandwidth utilization. *Id.* In the method illustrated in Figure 4, WAN keeper 148 periodically polls the link-side interface of edge router 112 to determine bandwidth utilization levels (step 400). *Id.* at 8:14–19. In decision step 408, WAN keeper 148 determines whether there is sufficient bandwidth and/or whether the state of the network can support additional calls. *Id.* at 8:22–41.

When the utilized bandwidth is above the maximum threshold or the unused bandwidth is below the maximum threshold, WAN keeper 148 institutes one or more measures to control bandwidth utilization. *Id.* These bandwidth control measures are implemented in step 412. *Id.* at 8:42–45.

2. Hepworth

Hepworth is titled “Voice Over IP Endpoint Call Admission,” and describes an intelligent endpoint or communication device that collects available bandwidth-related information metrics and/or performs call admission control functions. Ex. 1006, codes (54), (57). Hepworth also discloses an architecture including a switch or media server in communication with a plurality of subscriber communication devices in which the subscriber communication devices act as network nodes to collect available bandwidth-related information. *Id.* at code (57).

Hepworth's Figure 1, reproduced below, illustrates a VoIP architecture

100. Ex. 1006 ¶ 36.

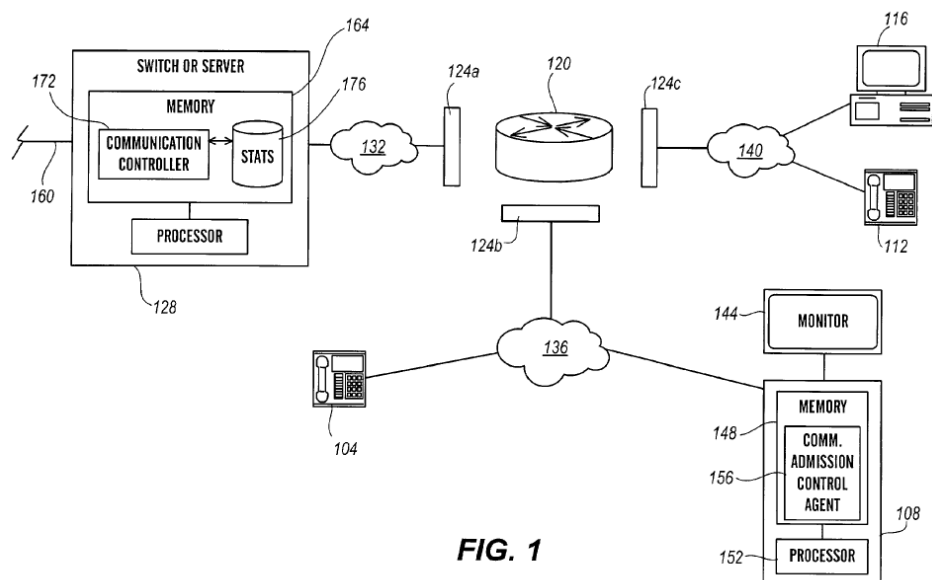


Figure 1 illustrates a VoIP architecture 100. *Id.* ¶ 36.

The VoIP architecture illustrated in Figure 1 includes: first, second, third, and fourth end points 104, 108, 112, and 116; router 120 having associated interfaces 124*a-c*; and switch or server 128. Ex. 1006 ¶ 36. The various components are interconnected by first, second, and third subnets 132, 136, and 140, which collectively form a local area network. *Id.* First and third endpoints 104 and 112 may be configured as IP hard-phones, and the second and third endpoints 108 and 116 may be configured as IP soft-phones. *Id.* Switch or media server 128 may perform automatic communication routing functions to the various endpoints. *Id.* ¶ 38. Switch or media server 128 is connected to communication lines 160 over which it receives incoming contacts (media or multimedia communication, such as a wired or wireless live voice communication, electronic mail, and video conferencing) on a public switched telephone network or IP network. *Id.*

3. Shaffer

Shaffer is titled “System and Method for Dynamic Codec Alteration.” Ex. 1007, code (54). As seen in Figure 1 of Shaffer, reproduced below, Shaffer discloses a bandwidth adjustment server (BWAS) (109) that monitors system bandwidth usage, sends requests to terminals (102A, 102B, and/or 106), to identify their coding capabilities, and directs each of the terminals to adjust their coding algorithms based on system bandwidth usage. *Id.* at code (57). If system bandwidth usage is high, the BWAS (109) requires the terminals to employ a less bandwidth intensive coding algorithm; and when system bandwidth usage is low, the BWAS (109) allows the terminals to employ higher bandwidth use coding algorithms. *Id.* Codec renegotiation may be initiated if there is a disparity between the bandwidth allocated to new connections versus ongoing connections, or an increase in data traffic. *Id.*

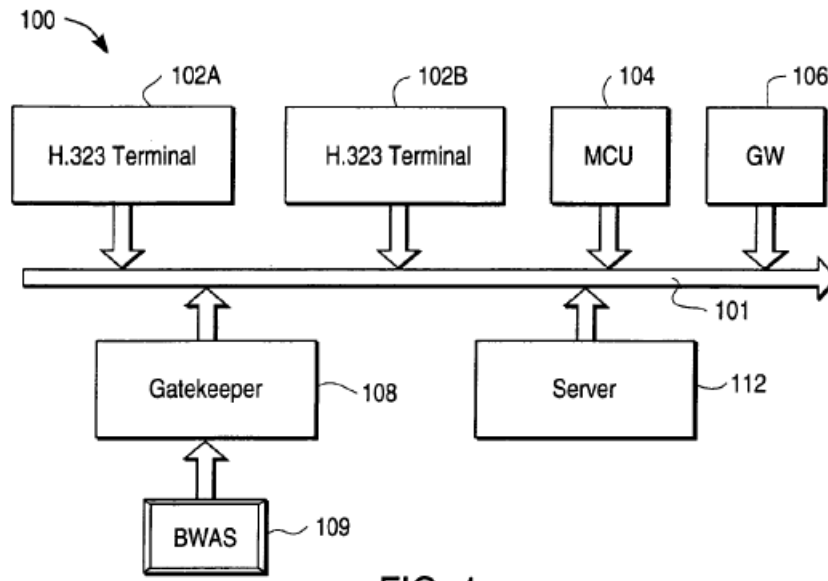


FIG. 1

Figure 1 illustrates a telecommunications system 100 including a bandwidth allocation server (BWAS) 109. *Id.* at 2:49–51, 3:1–8.

The BWAS illustrated in Figure 1 is configured with a first threshold identified as the threshold for reducing the coder/decoder (codec) speeds of idle endpoints. *Ex.* 1007, 1:62–2:8. The BWAS monitors system traffic, or communicates with other system monitors to determine system bandwidth usage. *Id.* The BWAS sends a message to user terminals, requiring them to identify their coding capabilities, and once this information is returned to the BWAS, the BWAS sends another message requiring the user terminals to lower their bandwidth usage by selecting a lower speed codec. *Id.* When network traffic drops below a second pre-configured threshold, the BWAS sends another message allowing the user terminals to restore their original codec choices. *Id.*

The BWAS also monitors bandwidth usage, and if there is a disparity between the bandwidth allocated to new connections versus ongoing ones or an increase in data traffic, the BWAS sends a Lower Codec Speed message to

all active H.323 entities. Ex. 1007, 2:9–17. This causes the H.323 entities to renegotiate their codecs. *Id.* The original calling party then selects a lower speed codec and sends a message to the called party to proceed with H.323 codec negotiation. *Id.*

Figure 9 of Shaffer, reproduced below, illustrates operations for codec renegotiation. *Id.* at 9:55–58.

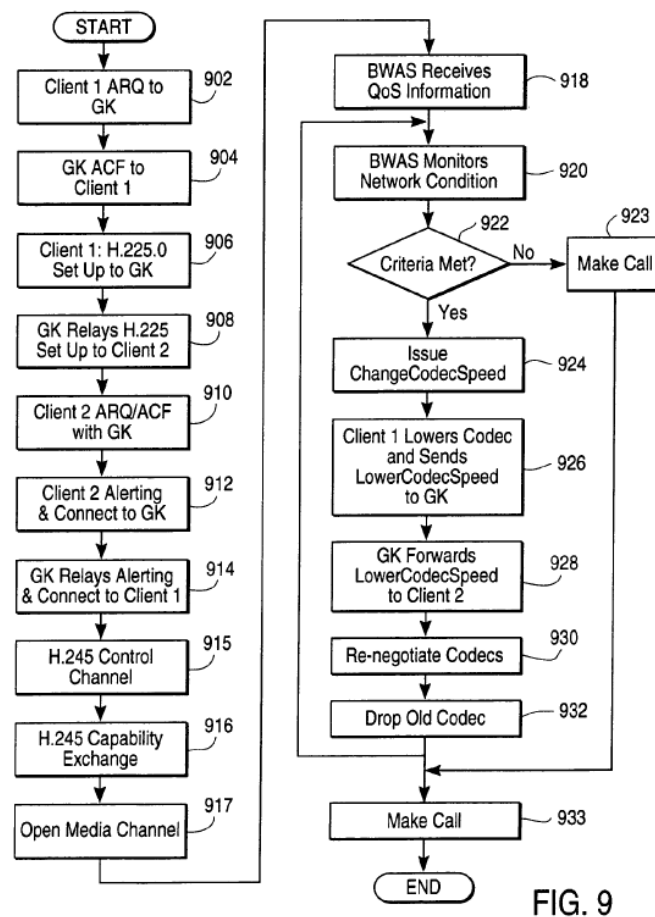


FIG. 9

Figure 9 illustrates operations for codec renegotiation. *Id.* at 9:55–58.

For example, in step 920 illustrated in Figure 9, the BWAS monitors the condition of the network. Ex. 1007, 10:18–38. In step 922, if the particular change codec criteria have been met, then (step 924) BWAS 109 causes the gatekeeper to issue a ChangeCodecSpeed command to the relevant calling party endpoint(s) (e.g., Client 1). *Id.* Then, in step 926, endpoint

Client 1 adjusts its codec speed and sends a LowerCodecSpeed command (or, if appropriate, a HigherCodecSpeed command) to the gatekeeper, which identifies the existing call whose codec is to be renegotiated. *Id.* In step 928, this command is forwarded to the endpoint Client 2. *Id.* The codec renegotiation then takes place over the H.245 control channel (step 930). *Id.* Once the renegotiation has occurred, the previously-used codec(s) are dropped (step 932), the system cycles back to step 920 and the call is made (step 933). *Id.* If, in step 922, the criteria had not been met, the communication would have been established without codec renegotiation (step 923). *Id.*

4. Independent Claim 1

As mentioned, Petitioner argues that claim 1 would have been obvious over the combination of Minhazuddin, Hepworth, and Shaffer. Pet. 20. Petitioner provides a limitation-by-limitation analysis of claim 1, supported by expert testimony. *Id.* at 44–70. As part of its *Fintiv* (discretionary denial) analysis, Patent Owner contends that the Petition did not establish a reasonable likelihood of proving unpatentability under any ground for any challenged claim. Prelim. Resp. 10–13. This argument by Patent Owner is not directed to any specific limitation or the combination of any references. *Id.* We address this argument in our *Fintiv* analysis below. As set forth in that analysis, we are not persuaded by it.

Below we address Petitioner’s showing for the limitations of claim 1.

a. [1.0] A system comprising:

Petitioner asserts that Minhazuddin teaches a system. Pet. 44. Petitioner quotes from Minhazuddin’s disclosure that “[t]he present invention in various embodiments, includes components, methods, processes, *systems* and/or apparatus substantially as depicted and described herein.” Ex. 1005,

10:9–11 (emphasis added), partially quoted in Pet. 44. We determine that Petitioner’s showing for the preamble of claim 1 is sufficient.

b. [1.1] a VoIP service provider system having a call control gatekeeper, a first interface and a second interface

Petitioner asserts that Minhazuddin and Hepworth render obvious limitation 1.1. Pet. 44–48. Petitioner argues that Minhazuddin discloses a system that provides call admission control for VoIP. *Id.* at 44. Petitioner cites the following disclosure from Minhazuddin:

The *call admission control* technique of the present invention can provide a number of advantages relative to conventional systems. For example, performing call admission control by controlling bandwidth utilization through varying codecs can efficiently utilize limited bandwidth resources. It can guarantee that there is enough bandwidth available to satisfy the needs of *packetized live Voice applications, such as VoIP*.

Ex. 1005, 3:58–65 (emphases added), cited by Pet. 44.

Petitioner further argues that Minhazuddin’s system, shown in Figure 1, comprises gatekeeper 124, local edge router 108, and local edge router 112. Pet. 44. Petitioner asserts that gatekeeper 148 includes WAN keeper 148 that performs dynamic call admission control. *Id.* Petitioner maps the recited call control gatekeeper to gatekeeper 124 and WAN keeper 148. *Id.*

Petitioner further argues that Minhazuddin’s edge router includes an interface. Pet. 44. Petitioner argues that, as a result, it would have been obvious to include interfaces in local edge routers 108 and 112. *Id.* Petitioner maps the recited first and second interfaces to the interfaces that it contends that an ordinarily skilled artisan would have been included in local edge routers 108 and 112, respectively. *Id.* at 44–45.

Petitioner also argues that Hepworth teaches a VoIP system that includes a router with interfaces for connecting to a LAN or WAN. Pet. 47. Figure 1 of Minhazuddin shows that local edge routers 108 and 112 are each connected to WAN 100. Ex. 1005, Fig. 1.

Petitioner argues that an ordinarily skilled artisan would have combined the teachings of Hepworth regarding interfaces with Minhazuddin's teachings because Hepworth provides implementation details regarding router interfaces, such as those used by Minhazuddin. Pet. 35. Petitioner argues that this combination is the simple combination of known elements to yield predictable results. *Id.* at 36.

After reviewing the record, we determine that Petitioner has made a sufficient showing for limitation 1.1.

c. [1.2] the first interface connected to a first LAN having an interface to a first VoIP telephone

Petitioner asserts that Minhazuddin, or alternatively Minhazuddin and Hepworth, or alternatively Minhazuddin, Hepworth, and Shaffer render obvious limitation 1.2. Pet. 49–57.

As mentioned, Petitioner maps the recited first interface to the interface it contends would be included in local edge router 108. Pet. 49. Petitioner argues that Minhazuddin teaches that its communication device 116 can be any packet-switched communication device for live communications, including an IP Hardphone or an IP Softphone. *Id.* Petitioner maps the recited first VOIP telephone to communication device 116. *Id.* at 49–50. Further, Petitioner argues that it was well known to include a communication device, such as communication device 116, as part of a LAN for communication. *Id.* at 50.

Petitioner also argues that Hepworth teaches a LAN subnet 140 with an interface link connected to IP hard-phone 112. Pet. 55. Petitioner asserts that it would have been obvious to implement Minhazuddin's communication device 116 is a LAN having a plurality of links for connecting a plurality of communication devices to the LAN. *Id.* Petitioner argues that it would have been obvious to use a network interface, as taught by Shaffer, to facilitate coupling of Minhazuddin's communication devices. *Id.* at 59. Further, Petitioner argues that combining the teachings of Minhazuddin and Shaffer merely represents a simple combination of known elements to yield predictable results. *Id.* at 40–41.

After reviewing the record, we determine that Petitioner has made a sufficient showing for limitation 1.2.

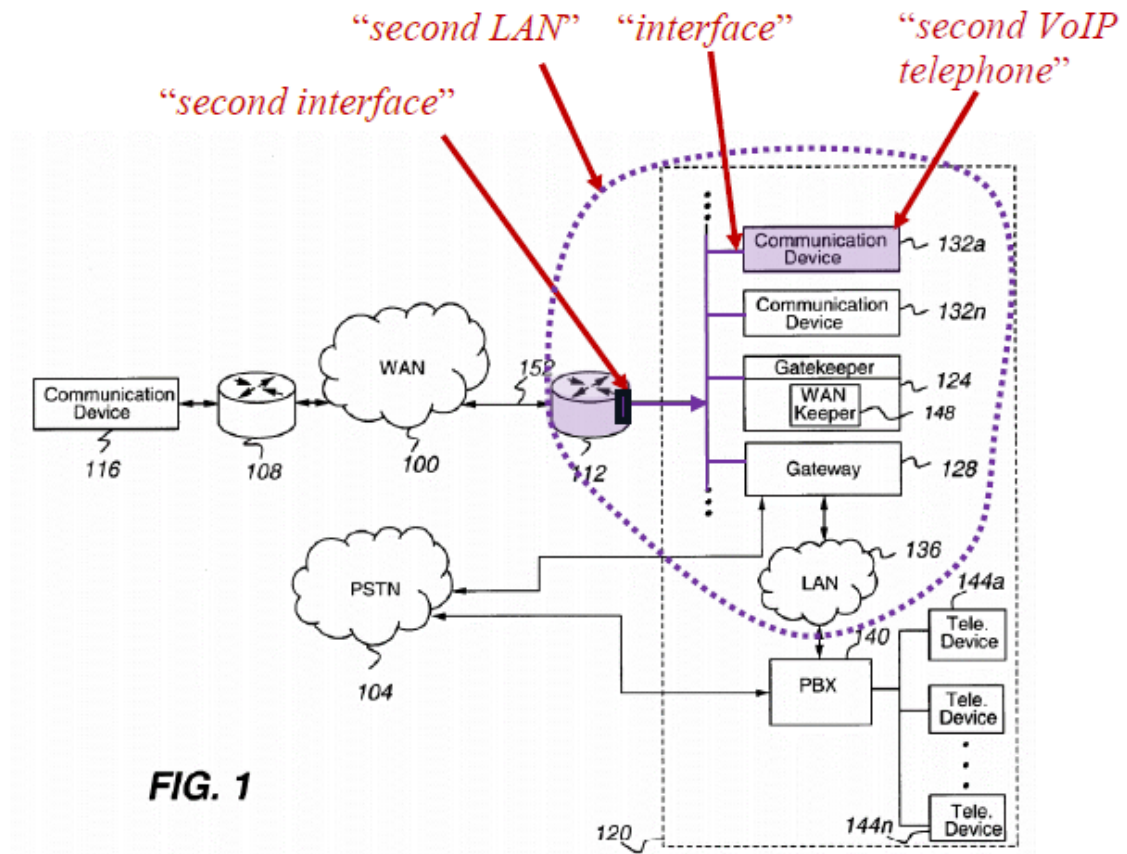
*d. [1.3] the second interface connected to a second LAN
having an interface to a second VoIP telephone*

Petitioner asserts that Minhazuddin and Shaffer render obvious limitation 1.3. Pet. 57–60. As mentioned, Petitioner maps the recited second interface to the interface it contends would be added to local edge router 112 in Minhazuddin. *Id.* at 57. Petitioner argues that Minhazuddin's local edge router 112 connects to enterprise network 120 comprising “a Local Area Network or LAN 136.” *Id.* (citing Ex. 1005, 4:36–46, Fig. 1). Petitioner asserts that this connection would have suggested to an ordinary skilled artisan to make local edge router 112 a junction point that separates WAN 100 and the LAN of enterprise network 120. *Id.* Petitioner asserts that routers were generally understood to represent a LAN/WAN junction point. *Id.*

Petitioner asserts that enterprise network 120 includes communication device 132a, which can be any packet-switched communication device for

live voice communications, such as IP hardphones and softphones. Pet. 58. Petitioner argues that an ordinarily skilled artisan would have understood that communication device 132 connects to a LAN for communication. *Id.*

Petitioner provides the following annotated version of Figure 1 of Minhazuddin:



Pet. 59. Figure 1 of Minhazuddin is a simplified communications network. Ex. 1005, 4:38–39. The annotations in the annotated figure above identify the elements to which Petitioner is mapping the recited second interface, the recited second LAN, the recited interface, and the recited second VoIP telephone. Pet. 59. As shown, Petitioner maps the recited second LAN to the combination of local edge router 112, communication devices 132a through 132n, gatekeeper 124, WAN keeper 148, and LAN 136. *Id.* Petitioner maps

the second VoIP telephone to communication device 132a and maps the interface to a portion of communication device 132a. *Id.* Petitioner further maps the second interface to a portion of local edge router 112. *Id.* Further, Petitioner argues that if the recited interface is not a network link, it would have been obvious to use, a network interface as taught by Shaffer. *Id.*

Petitioner argues that the combination of Minhazuddin and Shaffer “merely represents the application of a known technique (e.g., sending a signal per Shaffer to Minhazuddin’s communication devices) to yield predictable and beneficial results (e.g., informing the communication devices to renegotiate to a lower bit codec that uses less bandwidth, thereby freeing up bandwidth for new calls and maximizing the number of voice sessions carried).” Pet. 42.

After reviewing the record, we determine that Petitioner has made a sufficient showing for limitation 1.3.

e. [1.4] the first and second VoIP telephones being configured to communicate using a first codec

Petitioner asserts that Minhazuddin teaches or suggests limitation 1.4. Pet. 60–62. As mentioned above, Petitioner maps the recited first and second VoIP telephones to Minhazuddin’s communication devices 116 and 132a. *Id.* at 60. Petitioner further argues that Minhazuddin teaches selecting a codec to be used for communication between its communication devices and permitting the call to proceed with the selected codec. *Id.* Petitioner maps the recited first codec to Minhazuddin’s selected codec. *Id.* at 61.

After reviewing the record, we determine that Petitioner has made a sufficient showing for limitation 1.4.

f. [1.5.1] the call control gatekeeper configured to receive a call quality signal from the first VoIP telephone

Petitioner asserts that Minhazuddin and Hepworth render obvious limitation 1.5.1. Pet. 62–63. As mentioned, Petitioner maps the recited call control gatekeeper to Minhazuddin’s gatekeeper 124 (including WAN keeper 148). *Id.* at 62. Petitioner maps the recited first VoIP telephone to Minhazuddin’s communication device 116. *Id.* Petitioner argues that Minhazuddin discloses that WAN keeper 148 (part of gatekeeper 124) monitors the end-to-end QoS characteristics or metrics link(s) (or network state) by any suitable technique and that the measured QoS metrics include packet delay, jitter, packet loss. *Id.* Further, Petitioner argues that Hepworth teaches a suitable monitoring technique. *Id.* In particular, Petitioner asserts that Hepworth teaches a monitor that receives a signal with QoS information from VoIP endpoints. *Id.* Petitioner argues that the combination of Minhazuddin’s and Hepworth’s teachings discloses configuring WAN keeper 148 to receive a signal with QoS information (e.g., jitter, packet loss, round-trip time, number of dropped packets, bandwidth utilization, etc.) from communication device 116. *Id.* at 63. Petitioner maps the recited call quality signal to the signal with QoS information that WAN keeper 148 receives in its proposed combination of Minhazuddin and Hepworth’s teachings. *Id.* at 64.

After reviewing the record, we determine that Petitioner has made a sufficient showing for limitation 1.5.1.

g. [1.5.2] send an adjustment signal based on the call quality signal to the first and second VoIP telephones instructing the first and second VoIP telephones to communicate using a second codec

Petitioner asserts that Minhazuddin, Hepworth, and Shaffer render obvious limitation 1.5.2. Pet. 64–67. Petitioner maps the recited first and second VoIP telephones to communication devices 116 and 132a, respectively. *Id.* at 64. Petitioner maps the recited call quality signal to the signal with QoS information that WAN keeper 148 receives. *Id.*

Petitioner argues that Minhazuddin discloses that WAN keeper 148 (in gatekeeper 124) utilizes QoS information to enact bandwidth control measures when selected thresholds are exceeded. Pet. 64. Petitioner asserts that since the codec is implemented Minhazuddin’s endpoints, e.g., communication device 116 and communication device 132a, it would have been obvious for WAN keeper 148 to send a signal to both communication endpoints directing them to change codecs. *Id.* at 65. Petitioner argues that Shaffer’s system bandwidth allocation server (“BWAS”) incorporated in a gatekeeper that monitors QoS information and, if a threshold is met, directs the endpoints to renegotiate to a codec that uses less bandwidth by sending a message. *Id.* at 65–66.

Petitioner asserts that it would have been obvious to an ordinarily skilled artisan, when implementing Minhazuddin’s bandwidth control measures of renegotiating to a lower bit rate codec, for WAN keeper 148 to send a signal to the endpoints (also referred to a communication devices) directing them to use a lower bit rate codec that uses less bandwidth, in view of Shaffer. *Id.* at 66–67. Petitioner maps the recited adjustment signal to the signal WAN keeper 148 would send to renegotiate a lower bit codec. *Id.* at

67. Petitioner maps the recited second codec to the lower bit codec that uses less bandwidth. *Id.*

After reviewing the record, we determine that Petitioner has made a sufficient showing for limitation 1.5.2.

h. [1.6] wherein the adjustment signal based on the call quality signal is sent to the first and second VoIP telephones during a telephone call between the first and second VoIP telephones

Petitioner asserts that Minhazuddin, Hepworth, and Shaffer render obvious limitation 1.6. Pet. 68–70. Petitioner maps the recited adjustment signal based on the call quality signal that is sent to the first and second VoIP telephones to the signal to renegotiate to a lower bit codec based on QoS information. *Id.* at 68. Petitioner argues that it would have been obvious for WAN keeper 148 to send the signal to renegotiate to a lower bit codec when communication devices 116 and 132a are participating in an existing call and the QoS metrics exceed selected thresholds. *Id.* at 69. Petitioner argues that an ordinarily skilled artisan would have been motivated to do so to achieve Minhazuddin’s goal of having codes used on existing VoIP calls renegotiated to a lower bit rate codec. *Id.* Petitioner asserts that this would allow the existing call to continue despite a reduction in available bandwidth. *Id.* at 69–70.

After reviewing the record, we determine that Petitioner has made a sufficient showing for limitation 1.6.

i. Summary

In sum, we determine that Petitioner has demonstrated a reasonable likelihood of establishing that independent claim 1 would have been obvious in view of the combination of Minhazuddin, Hepworth, and Shaffer.

5. Independent Claim 2

Petitioner contends that independent claim 2 would have been obvious over the combined teachings of Minhazuddin, Hepworth, and Shaffer. Pet. 70–71.

Petitioner provides a limitation-by-limitation analysis of claim 1, supported by expert testimony. *Id.* at 44–70. Patent Owner has not presented any specific counterarguments for any limitation of claim 2. *See generally* Prelim. Resp. The arguments that Patent Owner made as part of its *Fintiv* analysis are addressed in our *Fintiv* analysis below. After reviewing the record, we determine that Petitioner has demonstrated a reasonable likelihood of establishing that independent claim 2 would have been obvious in view of the combination of Minhazuddin, Hepworth, and Shaffer.

B. Ground 2: Asserted Obviousness over Mundra, RFC3435, and RFC3660

Petitioner argues that claims 1 and 2 would have been obvious over the combination of Mundra, RFC3435, and RFC3660. Pet. 20.

1. Mundra

Mundra is titled “Quality of Voice Calls Through Voice Over IP Gateways,” and describes a technique to change a codec in real time during transmission of a voice over packet call placed over a packet switched network. Ex. 1008, codes (54), (57). Mundra’s Figure 2, reproduced below, illustrates a voice over packet broadband network configuration having a call agent module. *Id.* ¶ 14.

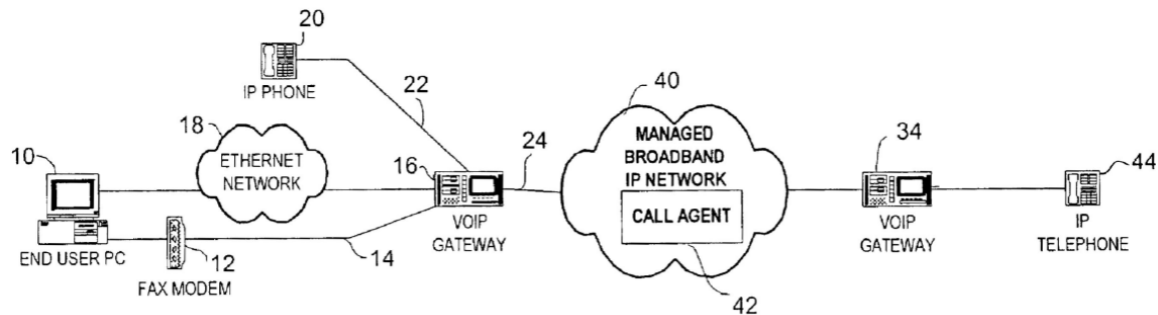


FIGURE 2

Figure 2 illustrates a voice over packet broadband network configuration having a call agent module. *Id.* ¶ 14.

Figure 2 illustrates a diagram of a broadband IP network connecting two VoIP telephony devices. *Id.* ¶ 18. In particular, Figure 2 includes a managed network 40 between a first IP telephony device 20 on one end and a second IP telephony device 44, such as an IP phone, on the second end. *Id.* ¶ 19. Gateways 16, 34 support voice over packet calls and monitor network conditions within managed network 40. *Id.* Gateway 16 sends and receives messages from a call agent module 42. *Id.*

A user may subscribe to an Internet telephony service where lowering the cost is the default policy at both gateways and IP telephony network provider. Ex. 1008 ¶ 20. A user may also desire a higher quality, or lower quality, codec during transmission, where the desired codec may or may not be the codec of lowest cost. *Id.* Dynamic codec changes are supported within gateways and call control protocols. *Id.* Gateway 16 receives such user commands and takes appropriate action by signaling agent 42 in managed network 40 to effect a change in the codec. *Id.* Monitored network events and user commands are received by gateway 16, which then sends commands and call control protocols to call controller agent 42 to cause a codec change. *Id.* A user-specified change in codec is made according to

user-defined criteria including cost and call quality based on the network conditions as monitored by gateway during the call. *Id.*

Broadband gateways 16 monitor and detect events affecting a VoIP call, including processing power, delay, and jitter. Ex. 1008 ¶ 21. Gateway 16 monitors the availability of processing power and determines if a lower bit rate codec could be supported. *Id.* The gateway may also monitor bandwidth for all calls terminating at the gateway and detect packet loss resulting from congestion. *Id.* ¶ 22. Packet loss in the media stream could signal network congestion and may result in selection of a low bit rate codec for affected calls or interchanging the codec with another call that may not be experiencing such losses. *Id.* The availability of greater bandwidth may also result in changing to a high bit rate codec, if so desired by the user. *Id.*

2. RFC3435

RFC3435 is a memo of the Network Working Group of the Internet Society, and describes an application programming interface and a corresponding protocol (MGCP) used between elements of a decomposed multimedia gateway. Ex. 1027, 1. The decomposed multimedia gateway consists of a Call Agent, which contains the call control “intelligence,” and a media gateway which contains the media functions, such as conversion from TDM voice to Voice over IP. *Id.* RFC3435 provides that media gateways contain endpoints on which the Call Agent can create, modify and delete connections in order to establish and control media sessions with other multimedia endpoints. *Id.* at 1, 20. The Call Agent may also instruct the endpoints to detect certain events and generate signals, and the endpoints automatically communicate changes in service state to the Call Agent. *Id.* at 1. For example, a Call Agent may ask to be notified about certain events occurring in an endpoint, such as off-hook events. *Id.* at 28.

In accordance with RFC3435, MGCP assumes a call control architecture where the call control “intelligence” is outside the gateways and handled by the Call Agents. Ex. 1027, 5. The MGCP assumes that the Call Agents will synchronize with each other to send coherent commands and responses to the gateways under their control. *Id.* MGCP is designed as an internal protocol within a distributed system that appears to the outside as a single VoIP gateway. *Id.* at 7. This system is composed of the Call Agent, and of a set of gateways, including at least one “media gateway” for performing the conversion of media signals between circuits and packets, and at least one “signaling gateway” when connecting to an SS7 controlled network. *Id.* The distributed gateway system interfaces on one side with one or more telephony switches, and on the other side with H.323 conformant systems. *Id.* The gateways focus on the audio signal translation function, while the Call Agent handles the call signaling and call processing functions. *Id.* As a consequence, the Call Agent implements the “signaling” layers of the H.323 standard, and presents itself as an “H.323 Gatekeeper” or as one or more “H.323 Endpoints” to the H.323 systems. *Id.*

3. RFC3660

RFC3660 is a memo of the Network Working Group of the Internet Society, and describes a basic set of Media Gateway Control Protocol (MGCP) packages. Ex. 1028, 1. The basic set of packages specified in RFC3660 are the Generic Media Package, the DTMF package, the Trunk Package, the Line Package, the Handset Package, the Supplementary Services Package, the Digit Map Extension, the Signal List Package, the Media Format Package, the RTP Package, the Resource Reservation Package, the Announcement Server Package, and the Script Package. *Id.* at 3.

4. Independent Claims 1 and 2

Petitioner provides a limitation-by-limitation analysis of claims 1 and 2, supported by expert testimony. Pet. 75–93. Patent Owner has not presented any specific counterarguments for any limitation of claims 1 and 2. *See generally* Prelim. Resp. The arguments that Patent Owner made as part of its *Fintiv* analysis are addressed in our *Fintiv* analysis below. After reviewing the record, we determine that Petitioner has demonstrated a reasonable likelihood of establishing that independent claims 1 and 2 would have been obvious in view of the combination of Mundra, RFC3435, and RFC3660.

IV. DISCRETIONARY DENIAL IN VIEW OF PARALLEL LITIGATION

Under § 314(a), the Director possesses “broad discretion” in deciding whether to institute an *inter partes* review. *See* 35 U.S.C. § 314(a); *Saint Regis Mohawk Tribe v. Mylan Pharms. Inc.*, 896 F.3d 1322, 1327 (Fed. Cir. 2018). The Director is “permitted, but never compelled,” to institute an *inter partes* review. *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016). The Board decides whether to institute an *inter partes* review on the Director’s behalf. 37 C.F.R. § 42.4(a) (2023).

Based on *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv*”), Patent Owner argues that we should exercise our discretion under § 314(a) to deny institution in view of the Related Litigation. Prelim. Resp. 1–15. Petitioner asserts the opposite. Pet. 15–19.

A. Nonexclusive Factors to Consider

When deciding whether to exercise discretion under § 314(a) to deny institution, the Board has considered the status of litigation involving the parties in light of the AIA’s objective “to provide an effective and efficient

alternative to district court litigation.” *NHK Spring Co. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8 at 12, 19–20 (PTAB Sept. 12, 2018) (precedential) (“*NHK*”). The Board has set forth the following nonexclusive factors to consider when determining whether to exercise discretion under § 314(a) to deny institution due to the advanced state of parallel litigation:

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

Fintiv, IPR2020-00019, Paper 11 at 5–6.

These factors “relate to whether efficiency, fairness, and the merits support the exercise of authority to deny institution in view of an earlier trial date in the parallel proceeding.” *Fintiv*, IPR2020-00019, Paper 11 at 6. Further, *Fintiv* instructs that the Board should take “a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review.” *Id.*; see PTAB Consolidated Trial Practice Guide at 55–56, 58 (Nov. 2019) (“CTPG”).¹⁰

We also follow the Director’s Memorandum setting forth an Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with

¹⁰ Available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>.

Parallel District Court Litigation (June 21, 2022) (“Director’s Memo”).¹¹ As specified in the Director's Memo, “compelling, meritorious challenges will be allowed to proceed at the PTAB even where district court litigation is proceeding in parallel.” Director's Memo 4. The Director's Memo, however, does not require that a petitioner establish compelling merits to avoid discretionary denial. Additionally, the Director clarified that “[t]he Board should first assess Fintiv factors 1–5; if that analysis supports discretionary denial, the Board should engage the compelling merits question.” *CommScope Techs. LLC v. Dali Wireless, Inc.*, IPR2022-01242, Paper 23 at 6 (PTAB Feb. 27, 2023) (precedential).

B. Analysis

As discussed in Section I.A above, the Related Litigation is *Croga Innovations Ltd. v. Cisco Systems, Inc.*, 2:24-cv-00065-JRG (E.D. Tex.).

1. Factor 1: Stay

There is no stay in the district court. *See* Pet. 15; Prelim. Resp. 3–6. As of the time the parties filed the Petition and the Preliminary Response, no motion requesting a stay of the district court proceedings had been filed by either party. Pet. 15; Prelim. Resp. 3–6. Petitioner contends that “the Board should not infer the outcome of such a motion” and “this factor is neutral on discretionary denial.” Pet. 15–16. Patent Owner contends “it is unlikely that a stay would be granted in the district court” (Prelim. Resp. 4) and “[t]his factor weighs against institution” (*id.* at 6).

¹¹ Available at https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf.

Our independent review of the docket in the Related Litigation indicates that a motion for a stay has been filed but not ruled upon. *Croga Innovations Ltd. v. Cisco Systems, Inc.*, 2:24-cv-00065-JRG (E.D. Tex.), DI 65. However, we will not speculate as to whether a stay may be granted if this proceeding is instituted.

We determine that this factor is neutral.

2. Factor 2: Proximity to Trial Date

Trial is set to begin in the district court on October 25, 2025. Pet. 16 n.1; Prelim. Resp. 6; Ex. 1030, 1. The projected deadline for the Final Written Decision in this proceeding is February 2026. Petitioner argues that, “[g]iven the proximity of the Board’s expected Final Written Decision and the estimated trial date, this factor is at least neutral.” Pet. 16. Patent Owner contends that “[t]his factor weighs against institution.” Prelim. Resp. 7.

The Guidance Memo instructs that “when other relevant factors weigh against exercising discretion to deny institution or are neutral, the proximity to trial should not alone outweigh all those other factors.” Guidance Memo 8. The Guidance Memo also instructs that “[p]arties may present evidence regarding the most recent statistics on median time-to-trial for civil actions in the district court.” *Id.* The parties present such statistics (Ex. 1031, 35) and agree that the projected trial date based on these statistics is late December, 2025. Pet. 16; Prelim. Resp. 7.

We determine that the trial date in the district court (whether based on the set trial date or median time-to-trial statistics) is reasonably proximate to, but still before, the projected statutory deadline for a final written decision. We are likely to be making our decision shortly after at least the jury verdict will be rendered in the district court.

We determine that this factor weighs marginally in favor of not exercising our delegated discretion to deny institution.

3. Factor 3: Investment in Parallel Proceeding

“This investment factor is related to the trial date factor, in that more work completed by the parties and court in the parallel proceeding tends to support the arguments that the parallel proceeding is more advanced, a stay may be less likely, and instituting would lead to duplicative costs.” *Fintiv*, Paper 11 at 10. If, at the time of the institution decision, a district court has issued substantive orders related to the challenged patent, such as a claim construction order, this circumstance weighs in favor of denial. *See id.* at 9–10. On the other hand, if the district court has not issued such orders, this circumstance weighs against discretionary denial. *Id.* at 10. Moreover, in evaluating this factor, “[i]f the evidence shows that the petitioner filed the petition expeditiously, such as promptly after becoming aware of the claims being asserted, this fact has weighed against exercising the authority to deny institution under *NHK*.” *Id.* at 11.

Neither party directs our attention to any substantive orders entered in the district court. Pet. 17; Prelim. Resp. 7–8. Petitioner argues that the parties have made little investment in the parallel proceeding and that it filed the Petition “within weeks of receiving revised infringement contentions (identifying the asserted claims).” Pet. 17. The Petition was filed on August 13, 2024, and the revised infringement contentions were filed on July 16, 2024. Ex. 1090, 2.

We determine this factor favors not exercising our delegated discretion to deny institution.

4. Factor 4: Overlap with Parallel Proceeding

Petitioner stipulates that “if trial is instituted, it will not pursue the same grounds in the district court litigation.” Pet. 17 (citing *Sand Revolution II, LLC v. Cont’l Intermodal Group-Trucking LLC*, IPR2019-01393, Paper 24 at 12 (PTAB June 16, 2020) (informative)). Patent Owner points out that “Petitioner has *not* stipulated to not pursue in a parallel district court proceeding the same grounds as in the petition or any grounds that could have reasonably been raised in the petition (*i.e.*, a *Sotera* stipulation).” Prelim. Resp. 9 (citing *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 at 18–19 (PTAB Dec. 1, 2020) (precedential as to § II.A)).

The Guidance Memo provides:

If the petition includes the same or substantially the same claims, grounds, arguments, and evidence as presented in the parallel proceeding, this fact has favored denial. [*Fintiv*, Paper 11 at] 12. Conversely, if the petition includes materially different grounds, arguments, and/or evidence than those presented in the district court, this fact has tended to weigh against exercising discretion to deny institution. *Id.* at 12–13.

Guidance Memo 7. The Guidance Memo instructs that “the PTAB will not deny institution of an IPR or PGR under *Fintiv* . . . where a petitioner stipulates not to pursue in a parallel district court proceeding the same grounds as in the petition or any grounds that could have reasonably been raised in the petition.” *Id.* at 9.

Based on the Petitioner’s stipulation, the same grounds will not be raised in the parallel proceeding. Patent Owner argues that Petitioner has asserted the same prior art against the challenged claims in both the parallel proceeding and this proceeding and that “there is complete overlap with respect to Petitioner’s invalidity arguments and evidence.” Prelim. Resp. 9.

However, according to the Docket Control Order, pretrial disclosures (witness list, deposition designations, and exhibit list) are not due in the parallel proceeding until August 4, 2025. Ex. 1030, 3. At this point, it would be speculation as to whether the same or substantially the same claims, grounds, arguments, and evidence will be presented in the district court as in this proceeding. Without speculating, all we can determine is that the same grounds will not be raised in the parallel proceeding and that the same or substantially the same claims, arguments, and evidence may be presented in both proceedings. Thus, the risk of overlap exists.

As in *Sand Revolution*, “Petitioner’s stipulation, however, mitigates to some degree the concerns of duplicative efforts between the district court and the Board, as well as concerns of potentially conflicting decisions.” *Sand Revolution*, IPR2019-01393, Paper 24 at 12. As informed by *Sand Revolution* (*see id.*), we find that this factor weighs marginally in favor of not exercising our delegated discretion to deny institution.

5. Factor 5: Whether Petitioner and Defendant are the Same Party

There is no dispute that Petitioner and the defendant in the parallel proceeding are the same party. Pet. 18; Prelim. Resp. 10–11. This factor weighs marginally in favor of exercising our delegated discretion to deny institution.

6. Factor 6: Other Circumstances

As discussed above, under *CommScope*, we consider whether the merits are compelling only after a determination that the first five *Fintiv* factors favor discretionary denial. Here, factor 1 is neutral, factors 2, 4 and 5 marginally weigh in favor of exercising our delegated discretion, and factor 3 weighs in favor of not exercising our delegated discretion. As a result, the first five factors slightly favor not exercising our delegated discretion to deny

institution. Given that the first five factors only slightly favor not exercising our delegated discretion to deny institution, it is instructive (although not necessary) to explore the sixth factor.

If the merits of a ground raised in the petition seem particularly strong on the preliminary record, this fact has favored institution. *Fintiv*, 14–15. By contrast, if the merits of the grounds raised in the petition are a closer call, then that fact has favored denying institution when other factors favoring denial are present. *Id.* at 15.

Here, Petitioner set forth a detailed showing, supported by expert testimony, demonstrating how the asserted teaches or suggests every claim limitation and argues that its showing is compelling. Pet. 18.

Patent Owner makes the following counterarguments. Patent Owner asserts that Petitioner has not alleged anticipation. Prelim. Resp. 11. Anticipation, however, is not required for unpatentability nor is it required for a compelling case of unpatentability. Further, Patent Owner argues that many of the asserted prior art references relate to call admission control. *Id.* at 12. Patent Owner asserts:

Call Admission Control is a deterministic and informed decision that is made before a voice call is established and is based on whether the required network resources are available to provide suitable QoS for the new call because it was thought to be better to deny network access under congestion conditions than to allow traffic onto the network to be dropped and delayed, causing intermittent impaired QoS and resulting in customer dissatisfaction.

Id. Patent Owner argues that call admission control is what the '368 patent characterizes as a previous solution. *Id.* Patent Owner further asserts that the '368 patent teaches “there exists a need for a system that can allow additional VoIP telephone calls to be placed when the available bandwidth of the WAN

is reduced below a desired level.” *Id.* at 12–13 (quoting Ex. 1001, 1:24–27). Patent Owner further argues that what the ’368 patent’s named inventors “invented was plainly not call admission control such as in the previous solutions of the prior art.” *Id.* at 13.

Patent Owner’s arguments about call admission control, however, are not persuasive because Patent Owner has not identified any limitation (and we have not independently identified any limitation) in claim 1 or claim 2 that excludes call admission control from its scope.

Patent Owner further argues that the asserted prior art does not disclose the claimed system. Prelim. Resp. 14. Patent Owner asserts:

Neither Shaffer nor Mundra disclose or teach VoIP telephones in separate Local Area Networks (LANs) communicating across a Wide Area Network (WAN). *See, e.g.*, Ex. 1007, Shaffer, and Ex. 1008, Mundra. Neither do the protocols disclosed in the Requests for Comments (RFCs). *See, e.g.*, Ex. 1027, RFC3435, and Ex. 1028, RFC3660. Because this prior art does not teach, disclose, or suggest VoIP telephones in LANs, it does not teach, disclose, or suggest the claimed interfaces.

Id. No limitation in claim 1 nor claim 2 requires that the first and second LAN communicate across a WAN. Further, no limitation expressly requires a VoIP telephone in a LAN. Instead, claims 1 and 2 require interfaces connecting a LAN to a VoIP telephone. *See* limitations 1.2, 1.3, 2.2, and 2.3. Petitioner has set forth how the asserted art teaches or suggests those limitations, and Patent Owner has not identified any defect in Petitioner’s showing for those limitations (or any other limitation).

On this record, Patent Owner has not identified a single defect in Petitioner’s evidence of unpatentability for any claim limitation or for any of Petitioner’s combination of references. Further, we have not independently found any defects or issues with Petitioner’s showing. Thus, the current

record would plainly lead to the conclusion that all challenged claims are unpatentable by a preponderance of the evidence. Thus, the sixth *Fintiv* factor favors not exercising our delegated discretion to deny institution.

We clarify that our determination that the record plainly leads to the conclusion that all challenged claims are unpatentable by a preponderance of the evidence is obviously based on the current record. The record after trial may have additional arguments and evidence that may result in the record not plainly leading to the conclusion that all challenged claims are unpatentable by a preponderance of the evidence. Additional arguments and evidence and a further review by the panel could result in the determination that the Petitioner has not met its burden of proving unpatentability by a preponderance of the evidence for one or both challenged claims.

We determine that the sixth factor favors institution.

7. Conclusion on Discretionary Denial

Factor 1 is neutral; factors 2 and 5 weigh marginally in favor of denying institution. Factors 3 and 6 weigh in favor of institution, and Factor 4 weighs marginally in favor of institution. The Board “holistic[ally] view[s] . . . whether efficiency and integrity of the system are best served by denying or instituting review” when evaluating the *Fintiv* factors under § 314(a). *Fintiv*, Paper 11 at 6. Based upon analysis of the *Fintiv* factors and considering the record as a whole, our holistic view is that efficiency and integrity of the system are best served by instituting review.¹² Thus, we do not exercise our discretion to deny institution under Section 314(a).

¹² We would reach the same conclusion if we did not consider factor 6.

V. CONCLUSION

We determine that Petitioner has demonstrated a reasonable likelihood of proving the unpatentability of at least one challenged claim of the '368 patent. Further, we decline to exercise our delegated discretion to deny institution under 35 U.S.C. § 314. We clarify, however, that our analysis is based only on the record as it stands now and that we have not made a final determination regarding the patentability of any challenged claim. Further, no party should rely on any preliminary finding or determination in this Decision nor assume that the evidence cited in this Decision for any preliminary finding or determination will result in a similar finding or determination in the Final Written Decision after a complete record is developed.

VI. ORDER

It is

ORDERED that, pursuant to 35 U.S.C. § 314(a) an *inter partes* review of the challenged claims in the '368 patent is hereby instituted on the asserted grounds set forth in the Petition; and

FURTHER ORDERED, that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is given of the institution of a trial, which commences on the entry date of this Decision.

IPR2024-01282
Patent 7,738,368 B2

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