

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ZOHO CORPORATION and ZOHO CORPORATION PVT., LTD.,
Petitioners

v.

MEETRIX IP, LLC,
Patent Owner

Case IPR2023-00377
Patent 9,253,332

PATENT OWNER MEETRIX IP, LLC'S SUR-REPLY

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EXHIBIT LIST

Previously Filed – Petitioners

Ex. No.	Description
1001	U.S. Patent No. 9,253,332 (the “’332 patent”)
1002	Patent Assignments for the ’332 patent
1003	Declaration of Dr. Henry H. Houh
1004	<i>Curriculum Vitae</i> for Dr. Henry H. Houh
1005	File History of Application No. 13/674,227 (the ’227 application)
1006	U.S. Patent No. 7,180,997 (“Knappe”)
1007	U.S. Patent No. 6,690,654 (“Elliott”)
1008	U.S. Patent No. 7,089,285 (“Drell”)
1009	U.S. Patent No. 6,701,434 (“Hoke”)
1010	1010 Guichard <i>et al.</i> , “MPLS and VPN Architectures, A practical guide to understanding, designing, and deploying MPLS and MPLS-enabled VPNs,” Cisco Press, 2001 (“VPN Textbook”)
1011	Declaration of Ingrid Hsieh-Yee, Ph.D., under 37 C.F.R. § 1.68
1012	U.S. Patent No. 3,060,265
1013	U.S. Patent No. 4,139,731
1014	U.S. Patent No. 3,601,530
1015	U.S. Patent No. 4,796,293
1016	A Primer on the T.120 Series Standard
1017	T.120 Standard (1996)
1018	U.S. Patent No. 6,237,025
1019	U.S. Patent No. 6,782,413
1020	U.S. Patent No. 6,980,526
1021	Caputo, “Cisco Packetized Voice & Data Integration,” McGraw-Hill, 2000
1022	De Moraes <i>et al.</i> , “The Internet Multicast from ITS: How it was Done and Implications for the Future,” IEEE Communications Magazine, January 1995
1023	U.S. Patent Publication No. 2004/0261116 A1
1024	U.S. Patent No. 6,850,496
1025	U.S. Patent No. 6,553,515
1026	U.S. Patent No. 6,633,848
1027	Computer Desktop Encyclopedia

1046	Declaration of C.J. Alice Chuang
1047	Declaration of Carolyn Chang
1048	Declaration of Ryan J. Marton

Previously and Currently Filed – Patent Owner

Ex. No.	Description
2001	Declaration of Thomas Dye
2002	Memorandum Opinion and Order Regarding Claims Construction dated December 1, 2017

I. PATENT OWNER’S SURREPLY

A. INTRODUCTION

The Board instituted *inter partes* review on claims 1-12, utilizing Knappe, Elliott, VPN Textbook, Drell, and Hoke as primary references.

Claim(s) Challenged	35 U.S.C. § ¹	Reference(s)/Basis
1, 2, 4, 5, 7	103(a)	Knappe, ² Elliott, ³ VPN Textbook ⁴
3, 6, 8–11	103(a)	Knappe, Elliott, VPN Textbook, Drell ⁵
12	103(a)	Knappe, Elliott, VPN Textbook, Drell, Hoke ⁶

Decision Granting Institution at 9.

Throughout the Reply, Petitioners vacillate between criticizing “attorney argument,” (*e.g.*, Reply at 1) which is of course how *Phillips* is applied by attorneys (and ultimately this Court) to the facts—favoring the intrinsic record over testimony of experts—and the declaration of the inventor. Mr. Dye’s testimony is not offered as an inventor *per se*, but rather that of a person of ordinary skill, from whose vantage point the inventions must be understood. *See Verizon Servs. Corp. v. Cox Fibernet Va., Inc.*, 602 F.3d 1325, 1339-40 (Fed. Cir. 2010) (holding an inventor may testify as an expert if qualified as such, otherwise an inventor may testify as a technical lay

witness).¹

As a person with a B.S. in Electrical Engineering and Computer Science and 30 years in computer networking and software, Mr. Dye satisfies the POSITA criteria of both parties, a fact unchallenged by Petitioners, and his declaration is on as solid legal footing as Petitioners' hired expert. An inventor does not cease to satisfy the criteria of a POSITA by virtue of having invented.

Petitioners also criticize Patent Owner for bringing terms in these claims and related terms that have been construed by the district court to this body's attention. Reply at 2. Petitioners then incorrectly claim that none of those terms are relied upon or deemed relevant. To the contrary, "VPN," "VPN tunnel" and "mixing" are all directly relevant and relied upon by Patent Owner, while the others provide relevant context to the analysis.

B. THE VPN TEXTBOOK'S CONTENT HAS BEEN PREVIOUSLY CONSIDERED, AND ITS GENERIC TEACHINGS CANNOT BE USED TO FILL A CLAIM-GENERATED TEMPLATE

Petitioners first misstate the argument of Patent Owner regarding the VPN

¹ Moreover, "[a]n inventor is a competent witness to explain the invention and what was intended to be conveyed by the specification and covered by the claims. The testimony of the inventor may also provide background information, including explanation of the problems that existed at the time the invention was made and the inventor's solution to these problems." *Braun Corp. v. Maxon Lift Corp.*, 282 F. Supp. 2d 931, 934 (N.D. Ind. 2003) (admitting inventor opinion testimony about the structure and function of the patented wheelchair lift because it was based on his personal perception), *aff'd*, 97 F. App'x 335 (Fed. Cir. 2004).

Textbook (Ex_1010) and then misstates the law with respect to why it is not invalidating art. Reply at 3. Patent Owner did not assert that this particular textbook from Cisco was previously considered. It said that *three other Cisco VPN guides were*. Paper 10 (Patent Owner Response) at 14. That is undisputed. Patent Owner then argued, correctly, that using general references like a textbook cannot be meaningfully combined with other references unless there is a reason to combine; otherwise, general purpose references could be used as a template to generate nearly any circuit or network configuration out of constituent components. *See Orexo AB v. Actavis Elizabeth LLC*, 903 F.3d 1265, 1271 (Fed. Cir. 2018) (reversing and remanding finding of obviousness).

Petitioners have identified absolutely nothing present in VPN Textbook (Ex_1010) that was not already presented and considered in the other three VPN guides from Cisco. Petitioners have apparently found a fourth Cisco guide and attempted to imbue it with a new veneer. Substantively, it adds nothing that was not previously considered and over which the claimed invention was properly determined patentable by the USPTO. Regardless, it does not render the claims unpatentable under Section 103 in combination the art of record, as discussed below.

C. THE PRIOR ART OF RECORD DOES NOT TEACH OR DISCLOSE THE DIFFERENTIATED MIXED AUDIO STREAMS OF THE INSTITUTED CLAIMS (*PETITIONERS' REPLY, GROUND 1, SECTION B.1*)

The first argument raised in the Reply—that “audio streams” are

“inapposite”—can be readily dismissed. Claims 1 and 8, which were reproduced in Petitioners’ Reply, recite mixing PSTN client “audio data” with moderator “audio data” and then sent to a remote client. *See* Reply at 5. Petitioners raise a distinction without a difference. Each component of audio data, as part of a continuous conference per the claims, reflects an audio stream, as borne out in the district court’s claim constructions.

For example, the district court construed “first mixed data stream” in a family member patent as a data stream that contains a mix of both the PSTN client audio data and moderator audio-video data but not remote client audio-video data. *Ex. 2002* at 33. This is also reflected in the specification of the ’332 Patent. *See, e.g.*, ’332 Patent at 2:30-37 (referring to “audio or video streams” and “media streams”); 4:33-38; Fig. 6; 6:61-6:20 (in reference to Fig. 6, describing “full duplex” audio, including from PSTN client from a standard telephone).

As previously argued, Fig. 6 depicts such an arrangement. This claimed mixing arrangement is not shown in any prior art of record.

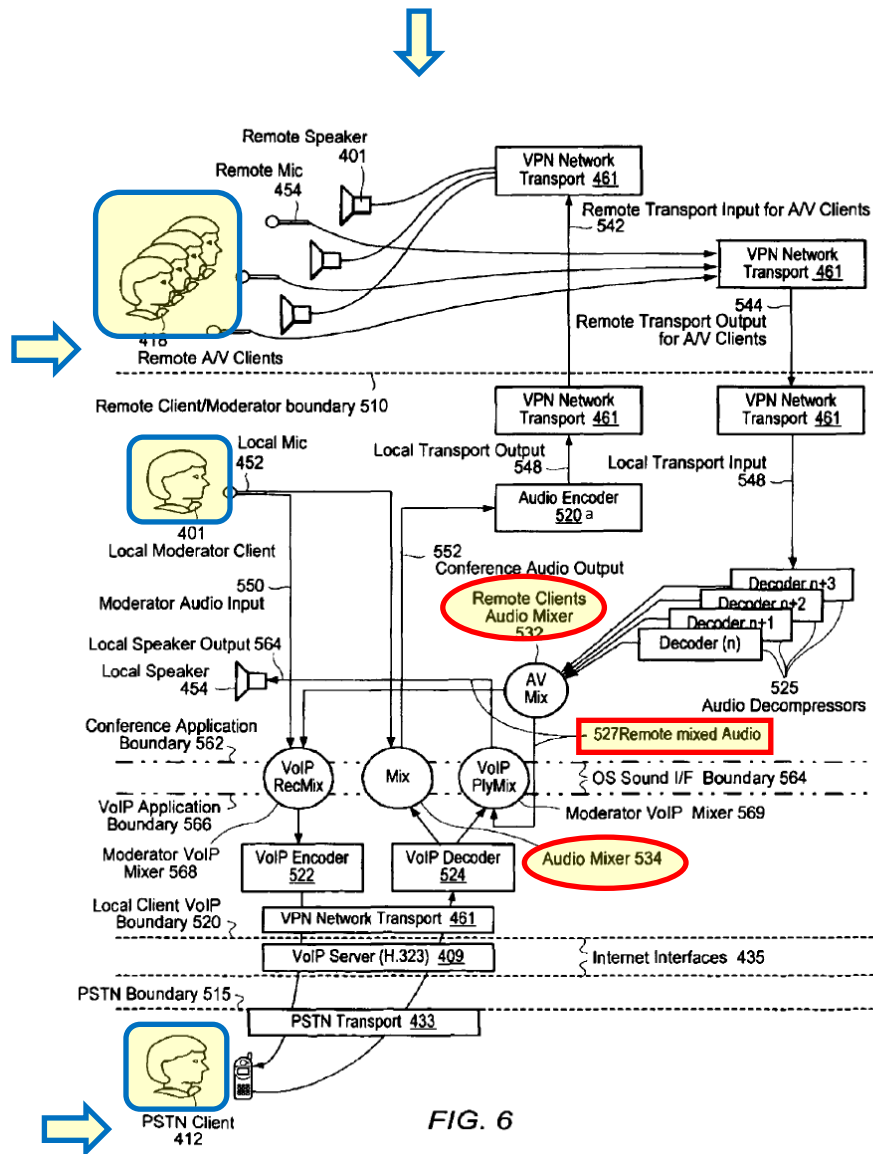
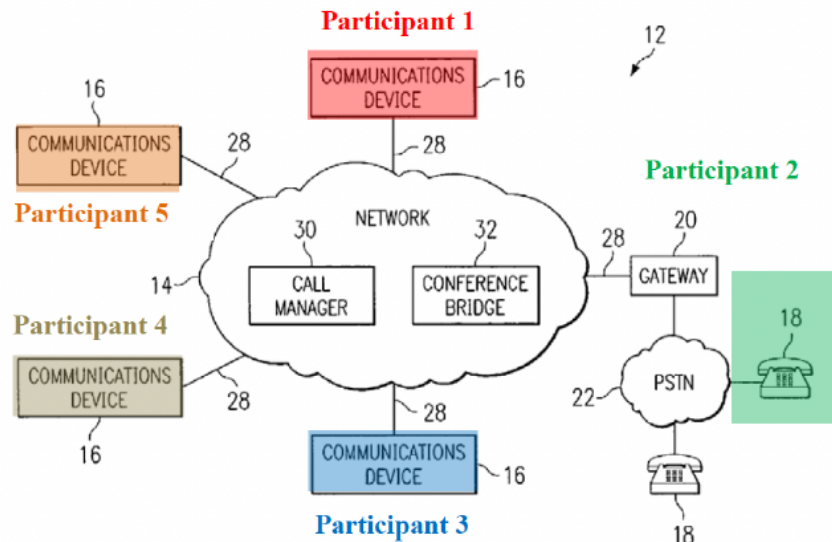


FIG. 6

As argued in Patent Owner’s Response, this differentiated mixing is performed to avoid low bandwidth bottlenecks and feedback. Exhibit 2001 (Dye Decl.) at ¶8. Drell, the only reference to make any comment about mixing, simply says a single mixer combines “in the broadest and most general sense.” Drell, 5:8-25.

Petitioners “annotated” diagram of Knappe demonstrates the opposite of their

point. See below excerpt.



Ex_1006, FIG. 1 (annotated); Ex_1003 ¶176. Knappe teaches that the “input buffers receive and buffer packets of input audio streams from participants for processing by conference bridge 32,” which would include audio data from participant 3 (the moderator). Ex_1006, 6:3-6; Ex_1003 ¶177. Thus, Knappe discloses receiving audio data from a moderator. Ex_1003 ¶¶176-179.

Reply at 7. With respect to claim 1, there is no step taught of: “mixing the first audio data from the PSTN client with the second audio data from the moderator into a first mixed audio data” and separate step of “mixing the second audio data from the moderator with the third audio data from the remote client into a second mixed audio data.” ’332 Patent, claim 1. Instead, there is a conference bridge black box that Petitioner contends without basis performs these steps. With respect to claim 8, there is no “first mixer...,” “second mixer...,” “first mixed audio data,” and “second

mixed audio data.” Recall that the district court construed these terms as follows:

“first mixer” a mixer that is not the second or third mixers

“second mixer” a mixer that is not the first or third mixer

“first mixed data stream” data stream that contains a mix of both the PSTN client audio data and moderator audio-video data but not remote client audio-video data

“second mixed data stream” data stream that contains a mix of both the remote client audio-video data and moderator audio-video data but not PSTN client audio data

“first mixed audio data” data that contains a mix of both the PSTN client audio data and moderator audio data but not remote client audio data

“second mixed audio data” data that contains a mix of both the moderator audio data and remote client audio data but not PSTN audio data

In short, none of the prior art of record teaches the novel sequence of mixing.

D. CLAIMS 1-2, 4-5 AND 7 ARE NOT OBVIOUS OVER KNAPPE IN VIEW OF ELLIOTT AND THE VPN TEXTBOOK (*PETITIONERS’ REPLY, GROUND 1, SECTION B.2, B.3*)

The Patents-in-Suit “teach systems and methods of achieving multi-participant, audio/video conferencing, over the Internet, using **secure connections** and multicasting.” Exhibit 2001 (Dye Decl.) at ¶6 (emphasis added). Tunneling as construed by the district court means “a connection between two devices that permits encapsulating a first packet from one protocol in a second packet from a different protocol.” Exhibit 2002 at 15.

Absent from Petitioners’ prior art references is the concept of a VPN or VPN

tunneling as claimed. Petitioners argue that “Elliot expressly discloses securing the transmission of audio data with VPN tunnels.” Reply at 16. That is incorrect. The sole mention of “VPN” in Elliot is passing reference that “Network 18 *could also comprise other IP-based networks as well as other networks....which can be either a public or a carrier supported virtual private network.*” Exhibit 1007 (Elliot) at 4:20-35 (emphasis added). It neither mentions nor teaches provisioning claimed types of mixed data over a VPN or VPN tunnel—just that a network *could* include an “intranet” or VPN.

Elliot teaches combining a traditional analog phone connection with an agent workstation. Elliot would not suggest to a person of ordinary skill in the art that VPN tunneling should or could be implemented to protect voice over the Elliott PSTN phone connection or access to a publicly available URL on the Web. Exhibit 2001 (Dye Decl.) at ¶21. First, a VPN (a private network of securely connected appliances configured within a public network) cannot be implemented over PSTN. Exhibit 2001 (Dye Decl.) at ¶22. Second, there would be no motivation to protect a direct PSTN connection in the manner claimed. Exhibit 2001 (Dye Decl.) at ¶¶ 21-22.

Elliot enables multimedia collaboration by allowing a first party, an agent in a call-center, to manage interactions with two or more remote parties via a computer program, establishing separate sessions for each party. This allows independent

communication. Elliot is simply talking about two independent calls with two independent remote parties connected to a call-center. The two remote parties are not connected to each other, directly or indirectly. Because Elliott is directed to a different problem, the discussion in Elliott related to VPNs is never in relation to audio as claimed and certainly does not suggest VPN tunneling would be used in transmitting audio. Exhibit 2001 (Dye Decl.) at ¶23. Although Elliot mentions in passing a Virtual Private Network (VPN), its application can only be understood as directed to “network 18,” which is used to connect two computers over the Internet, and not audio data, mixed or otherwise. Exhibit 1007 (Elliott) at 4:6-19. In summary, a VPN tunnel as recited in claim 10 is not disclosed or suggested for transmission of audio data by the prior art of record.

Moreover, unlike the Patents-in-Suit, Elliot does not disclose the concept of mixing audio or streaming mixed digital audio, video and collaboration data. Nor does Elliot teach a secure means of provisioning multimedia conferencing. Exhibit 2001 (Dye Decl.) at ¶11. This is important because claims 5 and 7 are directed towards transporting mixed data (audio and video) streams across a VPN tunnel.

Mr. Dye explained that “Drell discloses conference scenarios involving the simultaneous connection of multiple participants within a unified call. In contrast, Elliot’s disclosure pertains solely to isolated one-to-one interactions. Hence, combining Drell[...with Elliot[] is inherently improper, as the systems have

different objectives.” Exhibit 2001 (Dye Decl.) at ¶26. Combining either with the general concepts discussed in the VPN Textbook does not in any way render obvious the teachings in the Patents-in-Suit. Exhibit 2001 (Dye Decl.) at ¶16-17.

Elliot teaches a first party, an agent in a call-center, to manage interactions with two or more remote parties via a computer program, establishing separate sessions for each party. Petitioners seek to combine Elliot (EX_1007) with Knappe or Drell. As described above, Elliot teaches combining a traditional analog phone connection with an agent workstation. Neither of the two disparate parts of Elliot—a one-to-one POTS or PSTN phone connection or URL sharing between computers using conventional Internet protocols—would suggest to a person of ordinary skill in the art that a VPN tunnel should or could be implemented to protect voice over the Elliott POTS phone connection or access to a publicly-available URL on the Web. Exhibit 2001 (Dye Decl.) at ¶¶ 20-21. First, a VPN, or—“a private network of securely connected appliances configured within a public network”—cannot be implemented over PSTN. Exhibit 2001 (Dye Decl.) at ¶22. Even less so, a VPN tunnel allows multiple protocols. Second, there would be no motivation to protect a

direct PSTN connection in the manner claimed. Exhibit 2001 (Dye Decl.) at ¶21.

E. NONE OF KNAPPE, ELLIOTT OR VPN TEXTBOOK DISCLOSE “THROUGH A FIRST VIRTUAL PRIVATE NETWORK (VPN) TUNNEL” OF INDEPENDENT CLAIM CLAIM 1 (*PETITIONERS’ REPLY, GROUND 1, SECTION B.3. AND GROUND 2, SECTION C.1*)

The Patents-in-Suit “teach systems and methods of achieving multi-participant, audio/video conferencing, over the Internet, using **secure connections** and multicasting.” Exhibit 2001 (Dye Decl.) at ¶6 (emphasis added). Tunneling, as construed by the district court, means “a connection between two devices that permits encapsulating a first packet from one protocol in a second packet from a different protocol.” Exhibit 2002 at 15.

Petitioners assert Elliot discloses VPN tunneling. Reply at 4. It does not. The district court construed “VPN tunnel” to mean a connection between two devices that permits encapsulating a first packet from one protocol in a second packet from a different protocol. Wholly devoid from Petitioners’ prior art references is the concept of a VPN or VPN tunneling. Petitioners argue that “Elliot expressly discloses securing the transmission of audio data with VPN tunnels.” Reply at 12. That is incorrect. The sole mention of “VPN” in Elliot is passing reference that “Network 18 *could also comprise other IP-based networks as well as other networks....which can be either a public or a carrier supported virtual private network.*” Exhibit 1007 (Elliot) at 4:20-35 (emphasis added). It neither mentions

nor teaches provisioning different types of mixed data over a VPN or VPN tunnel—just that a network *could* include an “intranet” or VPN.

No reference discloses this sequence of mixed audio signals. Drell simply says a single mixer combines “in its broadest and most general sense.” Exhibit 1008 (Drell) at 5:8-25. Knappe says that mixing can be a “suitable mix dictated by the type of multiparty session and/or the participant.” Exhibit 1006 (Knappe) at 5:33-39. Petitioners elsewhere admit that “Knappe does not identify which specific communications device 16 or PSTN telephone/gateway (in Figure 1) corresponds with which specific participant (in Figure 3). IPR2023-00382 Paper 1 (Petition) at 33; Paper 13 (Reply) at 6. However, they take the liberty of adding significant annotations to these figures. Knappe does not disclose these “mixing” and “transmitting” limitations in the manner claimed. In particular, the use of a VPN tunnel is not disclosed in Knappe, and Elliot/VPN Textbook would not be combined with Knappe to cure this deficiency nor cure this deficiency even if combined for the reasons discussed, *infra*.

Elliot teaches combining a traditional analog phone connection with an agent workstation. Exhibit 2001 (Dye Decl.) at ¶21. Neither of the two disparate parts of the invention—a one-to-one POTS or PSTN phone connection—would suggest to a person or ordinary skill in the art that a VPN should or could be implemented to protect voice over the Elliott POTS phone connection or access to a publicly-

available URL on the Web. Exhibit 2001 (Dye Decl.) at ¶¶ 21-22.

Moreover, unlike the Patents-in-Suit, Elliot does not disclose the concept of mixing audio or streaming mixed digital audio, video and collaboration data. Nor does Elliot teach a secure means of provisioning multimedia conferencing. Exhibit 2001 (Dye Decl.) at ¶11.

Elliot in combination with the VPN Textbook (assuming that such a reference is relevant prior art) fails no better. General understanding of VPN technology does not teach the concept of mixing audio or streaming mixed digital audio, video and collaboration data through a secure VPN tunnel between circuit-switched and packet-switched networks.

Mr. Dye explained that “Drell discloses conference scenarios involving the simultaneous connection of multiple participants within a unified call. In contrast, Elliot’s disclosure pertains solely to isolated one-to-one interactions. Hence, combining Drell[...]with Elliot[] is inherently improper, as the systems have different objectives.” Exhibit 2001 (Dye Decl.) at ¶26. And, as previously explained, combining either with the general concepts discussed in the VPN Textbook does not in any way render obvious the teachings in the Patents-in-Suit. Exhibit 2001 (Dye Decl.) at ¶16-17.

In the claim, data arriving from a remote endpoint via a VPN tunnel is decrypted at the local moderator's end before being shared with the Public Switched

Telephone Network (PSTN) client. A VPN tunnel as recited in claims 1 and 8 is not disclosed or suggested for mixed audio data by the art of record.

F. A POSITA WOULD NOT BE MOTIVATED TO COMBINE KNAPPE AND ELLIOT IN THE MANNER CLAIMED (PETITIONERS' REPLY, GROUND 1, SECTION B.2)

As discussed in Patent Owner's Response, "Brief summary of EX_1006 – US7180997 ("Knappe")," Knappe does not teach securing multi-party communication and does not disclose communication using a VPN tunnel adapted to the use of multiple protocols.

As set forth above, the Patents-in-Suit "teach systems and methods of achieving multi-participant, audio/video conferencing, over the Internet, using **secure connections** and multicasting." Exhibit 2001 (Dye Decl.) at ¶6 (emphasis added). Tunneling, as construed by the district court, means "a connection between two devices that permits encapsulating a first packet from one protocol in a second packet from a different protocol." Exhibit 2002 at 15.

None of Petitioners' prior art references teach using a VPN or VPN tunneling. Petitioners argue that "Elliot expressly discloses securing the transmission of audio data with VPN tunnels." Reply at 16. That is incorrect. Elliott never discloses a VPN tunnel. The sole mention of "VPN" in Elliot is passing reference that "Network 18 *could also comprise other IP-based networks as well as other networks....which can be either a public or a carrier supported virtual private network.*" Exhibit 1007

(Elliot) at 4:20-35 (emphasis added). It neither mentions nor teaches provisioning different types of mixed data over a VPN or VPN tunnel—just that a network *could* include an “intranet” or VPN.

Elliot teaches combining a traditional analog phone connection with an agent workstation. Exhibit 2001 (Dye Decl.) at ¶21. Neither of the two disparate parts of the invention—a one-to-one POTS or PSTN phone connection—would suggest to a person or ordinary skill in the art that a VPN should or could be implemented to protect voice over the Elliott POTS phone connection or access to a publicly-available URL on the Web. Exhibit 2001 (Dye Decl.) at ¶¶ 21-22.

Moreover, unlike the Patents-in-Suit, Elliot does not disclose the concept of mixing audio or streaming mixed digital audio, video and collaboration data. Nor does Elliot teach a secure means of provisioning multimedia conferencing. Exhibit 2001 (Dye Decl.) at ¶11. This is important because the claims are directed towards transporting mixed data (audio and video) streams across a VPN tunnel.

Elliot in combination with the VPN Textbook (assuming that such a reference is relevant prior art) fares no better. General understanding of VPN technology does not teach the concept of mixing audio or streaming mixed digital audio, video and collaboration data through a secure VPN tunnel between circuit-switched and

packet-switched networks.

G. NONE OF KNAPPE, ELLIOTT, DRELL OR VPN TEXTBOOK DISCLOSE “THROUGH A FIRST VIRTUAL PRIVATE NETWORK (VPN) TUNNEL” OF INDEPENDENT CLAIM CLAIM 8 (*PETITIONERS’ REPLY, GROUND 2, SECTION C.1*)

The district court construed “VPN tunnel” to mean a connection between two devices that permits encapsulating a first packet from one protocol in a second packet from a different protocol.

Drell teaches an improvement to *traditional* video conferencing technology: “Drell teaches an improvement to ‘traditional’ video conferencing systems, namely, a more efficient manner to increase the amount of video conferencing stations without the use of expensive essential hardware such as ‘IMUXs.’” Exhibit 2001 (Dye Decl.) at ¶12. The Drell specification explains that traditional video conferencing solutions are expensive and required MCUs with a “dedicated Inverse Multiplexer (“IMUX”).” Exhibit 1008 (Drell) at 1:55-59. In other words, Drell is directed to creating a software-based IMUX in lieu of a hardware-based IMUX. *Id.* at 2:6-9. “The IMUX functions are implemented in a software-based *circuit switch* operable to aggregate a plurality of processing trains to a wideband serial data stream.” *Id.* In other words, Drell simply improves a traditional dedicated circuit switched video conferencing system by offering a software IMUX in lieu of a hardware IMUX.

Purportedly to show the presence of the VPN tunnel in the claimed

configuration, Petitioners have combined Elliot (EX_1007) with Knappe or Drell. Elliot teaches combining a traditional analog phone connection with an agent workstation. Neither of the two disparate parts of the invention—a one-to-one POTS or PSTN phone connection—would suggest to a person of ordinary skill in the art that a VPN should or could be implemented to protect voice over the Elliott POTS phone connection or access to a publicly-available URL on the Web. Exhibit 2001 (Dye Decl.) at ¶¶ 21-22. First, a VPN, or—“a private network of securely connected appliances configured within a public network”—cannot be implemented over PSTN. Exhibit 2001 (Dye Decl.) at ¶22. Even less so, a VPN tunnel allows multiple protocols. Second, there would be no motivation to protect a direct PSTN connection in the manner claimed. Exhibit 2001 (Dye Decl.) at ¶¶ 21-22. Elliot thus enables multimedia collaboration by allowing a first party, an agent in a call-center, to manage interactions with two or more remote parties via a computer program, establishing separate sessions for each party. This allows independent communication. Elliot is simply talking about two independent calls with two independent remote parties connected to a call-center. The two remote parties are not connected to each other, directly or indirectly. Because Elliott is directed to a different problem, the discussion in Elliott related to VPNs is never in relation to mixed audio as claimed. Exhibit 2001 (Dye Decl.) at ¶23.

Knappe teaches a method of multipoint video conferencing between multiple

users. Knappe presents a conference call configuration involving numerous participants (more than two) connected to a unified call, wherein audio and video data from these participants are combined and then relayed to all the participants/attendees whereas Elliot is just disclosing about two independent one-to-one calls, wherein data (audio) from one participant is transmitted to the call center only, it is not transmitted to any third user/participant. Due to this fundamental difference, Elliot lacks the motivation or capability to be integrated with Knappe's.

Moreover, as previously discussed, Knappe discloses conference scenarios involving the simultaneous connection of multiple participants—more than two—within a unified call. In contrast, Elliot's disclosure pertains solely to isolated interactions. The limitation regarding provision of a VPN tunnel to protect *mixed audio* is taught by neither reference. Although Elliot mentions in passing a Virtual Private Network (VPN), its application can only be understood as directed to “network 18,” which is used to connect two computers over the Internet, and not audio data, mixed or otherwise. Elliott, 4:6-19.

Conversely, the mechanism detailed in the '332 Patent operates such that data arriving from a remote endpoint via a VPN tunnel is decrypted at the local moderator's end before being shared with the Public Switched Telephone Network (PSTN) client.

Given this intricate decryption and sharing process, combining either Drell's

or Knappe's teaching with Elliot's is inherently unsuitable for these limitations. In Elliot, secure audio data remains between the end user and call center whereas the '332 Patent shares the data secured between local moderator and remote client via VPN tunnel is decrypted and shared to the PSTN client. Additionally, the '332 Patent is employing a VPN bridge which creates a secure environment for multi-party conference call in which secured data through VPN tunnel is decrypted and shared with a third party (PSTN client) as required in the claim which is not present in any of the prior arts even by combining it with Elliot.

Contrary to Petitioners' blanket assertion that the claim constructions of which it failed to apprise the Board are irrelevant, Patent Owner never relies "on any of these claim constructions,"² Patent Owner has argued that it "it is crucial to distinguish between a VPN and a VPN tunnel," which Petitioners fail to do. Thus, Petitioners appear to apply an overly simplistic construction of VPN tunneling, as merely meaning a 'secure' connection." *See, e.g.,* Response at 21.

A VPN should be construed as "a private network of securely connected appliances configured within a public network." That is not shown by Knappe, Elliott or Drell; in Elliott, the VPN is mentioned only in the context of network 18, which is unrelated to audio communication.

A VPN tunnel, on the other hand, envisions multiple protocols transmitted on

² Reply at 2.

the channel, and is construed to mean “a connection between two devices that permits encapsulating a first packet from one protocol in a second packet from a different protocol.” Exhibit 2002. For example, in the context of Fig. 4, a VPN tunnel is disclosed enabling the use of a “multicast protocol,” resulting in the use of less bandwidth.

The VPN Textbook does not demonstrate or disclose the use of this topology in a multi-party conference call context. Petitioners would rely on Dr. Houh's personal experience with configuring and deploying VPN technology for VoIP traffic using the NBX 100 system, which is capable of conference calls, but does not point to prior art that can be relied on under Section 103. Moreover, the corresponding disclosure of VPN Textbook does not disclose the use of VPN tunnels in the claimed configuration.

It is crucial to distinguish between a VPN and a VPN tunnel. A VPN (Virtual Private Network) represents a secure network formed by interconnected devices, functioning within a public network framework. On the other hand, a VPN tunnel is a connection between two devices that permits encapsulating a first packet from one

protocol in a second packet from a different protocol.

H. NEITHER KNAPPE NOR DRELL DISCLOSE THE “THE METHOD OF CLAIM 1, FURTHER COMPRISING ENCODING THE FIRST MIXED AUDIO DATA INTO A FIRST COMPRESSED AUDIO DATA BEFORE TRANSMITTING THE FIRST MIXED AUDIO DATA TO THE REMOTE CLIENT” LIMITATION OF DEPENDENT CLAIM 6 (*PETITIONERS’ REPLY, GROUND 2, SECTION C AND C.2*)

As an initial matter, because transmitting mixed audio-video data is not taught or suggested by the prior art of record, “encoding” in accordance with claim 6 is also not taught or suggested.

Petitioners argue that Drell teaches the use of codecs to encode data before transmission over the Internet. Reply at 22. More specifically, Petitioners contend that “[t]he only evidence in the record establishes that a POSITA would have been motivated to combine the teachings of Knappe and Drell to produce the obvious, beneficial, and predictable results of having a user act as moderator as in the Knappe system and implementing various aspects of Knappe’s conferencing system as software and with an audio codec using a compression algorithm to reduce the amount of data being transmitted.” Even Petitioner’s statement of what is obvious to try is lengthy and complex. The evidence of record is that no one had done this before the claimed invention, and that Petitioner is using the claims as a template with the benefit of hindsight.

Knappe teaches the codec (coder/decoder) at the communication device. It

does not provide any teaching regarding encoding of the *claimed mixed audio data* and transmitting the *encoded mixed audio data* to the remote device. Conversely, Drell employs a straightforward method blending the audio and video data from all participants, whether they are from near the conference endpoint or the remote endpoints. Due to this fundamental difference, a POSITA would not be motivated to combine Knappe with Drell's approach, and even if they were combined, the encoding of mixed audio data is not taught in the manner claimed.

II. CONCLUSION

Patent Owner has shown that Petitioners' proposed grounds of unpatentability fail because they utilize combinations of references that do not disclose or suggest each and every limitation as recited by the '332 Patent claims. For at least the foregoing reasons, the Petition's grounds for unpatentability are legally deficient and claims 1-12 of the '332 Patent should be confirmed under 35 U.S.C. § 316.

Date: February 23, 2024

Respectfully submitted,

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CERTIFICATE OF WORD COUNT UNDER 37 C.F.R. § 42.24(c)(1)

I, the undersigned, do hereby certify that the foregoing PATENT OWNER MEETRIX IP, LLC'S SUR-REPLY, including footnotes, contains 4,578 words, as measured by the Word Count function of Word 2023. This is less than the limit of 5,600 words as specified by 37 C.F.R. § 42.24(c)(1).

/s/ Andrew G. DiNovo
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CERTIFICATE OF SERVICE

I hereby certify that on February 23, 2024, a true and correct copy of the foregoing PATENT OWNER MEETRIX IP, LLC'S SUR-REPLY was served by electronic mail upon the following counsel of record for Petitioners:

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