

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 IPR2023-00371
Patent 8,339,997

PATENT OWNER MEETRIX IP, LLC'S SUR-REPLY

TABLE OF CONTENTS

I.	SUR-REPLY.....	1
A.	INTRODUCTION TO REPLY TO PATENT OWNER’S ARGUMENTS	1
B.	THE VPN TEXTBOOK’S CONTENT HAS BEEN PREVIOUSLY CONSIDERED, AND ITS GENERIC TEACHINGS CANNOT BE USED TO FILL A CLAIM-GENERATED TEMPLATE	2
II.	PATENT OWNER’S RESPONSE TO PETITIONERS’ GROUNDS OF REJECTION AND THE INSTITUTION DECISION	3
A.	GROUND 1—CLAIM 1	3
B.	NEITHER KNAPPE NOR DE MORAES DISCLOSE THE “SENDING A FIRST MESSAGE TO EACH OF A PLURALITY OF MULTICAST APPLIANCES OVER THE INTERNET, WHEREIN THE FIRST MESSAGE COMPRISES A GROUP ADDRESS WHICH IDENTIFIES A PLURALITY OF PARTICIPANTS;” LIMITATION OF INDEPENDENT CLAIM 1 (<i>PETITIONERS’ LIMITATION 1.1</i>)	4
C.	NEITHER KNAPPE NOR DE MORAES DISCLOSE “EACH OF THE MULTICAST APPLIANCES RECEIVING THE FIRST MESSAGE;” OF INDEPENDENT CLAIM 1 (<i>PETITIONERS’ LIMITATION 1.2</i>).....	5
D.	KNAPPE DOES NOT DISCLOSE “THE TELEPHONE PARTICIPANT CALLING INTO A GATEWAY SERVER” LIMITATION OF INDEPENDENT CLAIM 1 (<i>PETITIONER’S LIMITATION 1.5A</i>)	5
E.	NEITHER KNAPPE NOR ELLIOTT DISCLOSE “THE TELEPHONE PARTICIPANT PROVIDING CONFERENCE ID INFORMATION;” LIMITATION OF INDEPENDENT CLAIM 1 (<i>PETITIONERS’ LIMITATION 1.5B</i>).....	7
F.	NEITHER KNAPPE NOR ELLIOTT DISCLOSE “THE	

	GATEWAY SERVER ESTABLISHING COMMUNICATION WITH A CONFERENCING SERVER;" LIMITATION OF INDEPENDENT CLAIM 1 (<i>PETITIONERS' LIMITATION 1.5C</i>).....	8
G.	KNAPPE DOES NOT DISCLOSE THE "AUTHENTICATING THE TELEPHONE PARTICIPANT;" LIMITATION OF INDEPENDENT CLAIM 1 (<i>PETITIONERS' LIMITATION 1.5D</i>).....	9
H.	NEITHER KNAPPE NOR DE MORAES NOR ELLIOTT DISCLOSE THE "WHEREIN THE GATEWAY SERVER IS OPERABLE TO USE THE MULTICAST GROUP INFORMATION TO ENABLE THE TELEPHONE PARTICIPANT TO PARTICIPATE IN THE MULTI-PARTICIPANT VIDEO CONFERENCE." LIMITATION OF INDEPENDENT CLAIM 1 (<i>PETITIONERS' LIMITATION 1.6</i>)	10
I.	NEITHER KNAPPE NOR DE MORAES NOR SHEPHERD DISCLOSE THE "THE METHOD OF CLAIM 1, WHEREIN THE TELEPHONE PARTICIPANT PARTICIPATING IN THE MULTI-PARTICIPANT VIDEO CONFERENCE COMPRISES: ENCAPSULATING THE MULTICAST IP PACKET AS A UNICAST PACKET;" LIMITATION OF DEPENDENT CLAIM 2...11	11
J.	NEITHER KNAPPE NOR SHEPHERD DISCLOSE THE "TRANSMITTING THE UNICAST PACKET OVER THE VIRTUAL PRIVATE NETWORKS ACROSS THE INTERNET BETWEEN ONE OR MORE APPLIANCES;" LIMITATION OF DEPENDENT CLAIM 2 (<i>PETITIONERS' LIMITATION 2.5</i>).....	12
K.	NEITHER KNAPPE NOR SHEPHERD NOR DE MORAES DISCLOSE "ONE OR MORE OF THE APPLIANCES DETERMINING THE MULTICAST DATA FROM THE UNICAST PACKET" OF DEPENDENT CLAIM 2 (<i>PETITIONERS' LIMITATION 2.6</i>)	14
L.	NEITHER KNAPPE NOR SHEPHERD NOR DE MORAES DISCLOSE "THE APPLIANCES PROVIDING THE MULTICAST DATA TO EACH OF THE OTHER PARTICIPANTS IN THE GROUP ADDRESS." LIMITATION OF DEPENDENT CLAIM 2 (<i>PETITIONER'S LIMITATION 2.7</i>)....	14
M.	DE MORAES DOES NOT DISCLOSE THE "CONFIGURING	

THE IP PACKET WITH A GROUP ADDRESS ACCORDING TO A MULTICAST PROTOCOL TO CREATE A MULTICAST IP PACKET.” LIMITATION OF DEPENDENT CLAIM 7 (<i>PETITIONERS’ LIMITATION 2.8</i>)	15
III. CONCLUSION.....	16

EXHIBIT LIST

Previously Filed – Petitioners

Ex. No.	Description
1001	U.S. Patent No. 8,339,997 (“the ’997 patent”)
1002	Patent Assignments for the ’997 patent
1003	Declaration of Dr. Henry H. Houh
1004	<i>Curriculum Vitae</i> for Dr. Henry H. Houh
1005	File History of Application No. 12/646,892 (the ’892 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 (Freedman)
1028	RFC 760

1029	RFC 791
1030	RFC 1112
1031	RFC 2401
1032	RFC 2406
1033	H.323 Standard
1034	U.S. Patent No. 7,281,058 (“Shepherd”)
1035	U.S. Provisional Patent Application No. 60/453,307
1037	Declaration of C.J. Alice Chuang
1039	Declaration of Carolyn Chang
1040	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. SUR-REPLY

A. INTRODUCTION TO REPLY TO PATENT OWNER'S ARGUMENTS

The Board instituted *inter partes* review on claims 1-10, utilizing Knappe, Elliott, VPN Textbook, de Moraes, and Shepherd as primary references.

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1, 3–7	103 ²	Knappe, ³ Elliott, ⁴ VPN Textbook, ⁵ de Moraes ⁶
2, 8–10	103	Knappe, Elliott, VPN Textbook, de Moraes, Shepherd ⁷

Decision Granting Institution at 7.

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

¹ Moreover, “[a]n inventor is a competent witness to explain the invention and what

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.

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 Textbook (Ex_1010) and then misstate the law with respect to why it is not invalidating art. Patent Owner did not assert that this particular textbook from Cisco was previously considered. It said that *three other Cisco VPN guides were*. 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

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).

1265, 1271 (Fed. Cir. 2018) (reversing and remanding finding of obviousness).

Petitioners have identified nothing present in VPN Textbook (Ex_1010) that was not already presented and considered in the other three VPN guides from Cisco. It has merely found a new Cisco guide and attempted to imbue it with a new veneer. Procedurally, it adds nothing that was not previously considered and over which the claimed invention was properly determined patentable by the USPTO. Substantively, it does not render any claim in valid, including in combination with the other prior art of record, as argued below.

II. PATENT OWNER’S RESPONSE TO PETITIONERS’ GROUNDS OF REJECTION AND THE INSTITUTION DECISION

A. GROUND 1—CLAIM 1

Knappe and Elliott, including in combination with VPN Textbook, de Moraes and Shephard, do not disclose the independent claim limitations of claim 1.

Petitioners claim that Patent Owner’s arguments with respect to Knappe and de Moraes are improper because shortcomings of the references’ teachings are addressed individually, “not in combination,” citing *In re Merck*, 800 F.2d at 1097.

Of course, it is impossible not to consider references on the basis of their own teachings, and *Merck* does not hold otherwise. It holds that references must be considered “not *in isolation*, but for what it fairly teaches in combination with the prior art as a whole.” *Id.* (emphasis added). Patent Owner clearly argued that neither Knappe nor de Moraes disclose multiple elements, including “the sending a first

message to each of a plurality of multicast appliances over the Internet, wherein the first message comprises a group address which identifies a plurality of participants.” Response at 17-18. Taken together or in isolation, no combination discloses the missing elements.

B. NEITHER KNAPPE NOR DE MORAES DISCLOSE THE “SENDING A FIRST MESSAGE TO EACH OF A PLURALITY OF MULTICAST APPLIANCES OVER THE INTERNET, WHEREIN THE FIRST MESSAGE COMPRISES A GROUP ADDRESS WHICH IDENTIFIES A PLURALITY OF PARTICIPANTS;” LIMITATION OF INDEPENDENT CLAIM 1 (*PETITIONERS’ LIMITATION 1.1*)

In their Reply, Petitioners implicitly acknowledge that neither Knappe nor De Moraes disclose this element. Reply at 5 (“De Moraes teaches [] that the communication devices 16 of Knappe, like the ‘MBONE routers,’ *could use* the well-known IP multicast addressing techniques taught by the RFC 1112 standard.”) Petitioners thus argue that yet another reference on top of its combination, not part of the claimed combination (the RFC 1112 standard), could be applied using the claim as a template to a device that is neither taught nor suggested by De Moraes. Petitioners then proceed to craft their own theoretical prior art system, cavalierly applying the claimed technology to a reference-unspecified component “like the ‘MBONE routers.’” *Id.* Petitioners picking a device “like the ‘MBONE routers,’” would fabricate a message from a reference that is not disclosed as part of the claimed combination and would manufacture a message and its content from whole

cloth.

Knappe discloses identification of individual participants using a called number or other unspecified criteria. Exhibit 1006 at 5:27-29. De Moraes does not disclose the nature of any message or its contents as claimed. '997 Patent, 4:20-36. The claimed element is absent from the prior art of record, and a POSITA would not be so motivated.

C. NEITHER KNAPPE NOR DE MORAES DISCLOSE “EACH OF THE MULTICAST APPLIANCES RECEIVING THE FIRST MESSAGE;” OF INDEPENDENT CLAIM 1 (*PETITIONERS’ LIMITATION 1.2*)

Because Knappe and De Moraes do not, even taken together, teach or disclose “sending a first message” to each of a plurality of multicast appliances, neither do they teach or disclose a plurality of multicast appliances receiving that message in claim 1.

D. KNAPPE DOES NOT DISCLOSE “THE TELEPHONE PARTICIPANT CALLING INTO A GATEWAY SERVER” LIMITATION OF INDEPENDENT CLAIM 1 (*PETITIONER’S LIMITATION 1.5A*)

Petitioners assert that identifying Knappe’s teaching of a gateway, rather than a “server,” is a claim construction argument. That is incorrect. Indeed, it is Petitioners that make a claim construction argument by asserting that a gateway is a server. A “gateway server” is definitionally a server. The plain and ordinary meaning of that term excludes that which is not a server, namely the basic gateway disclosed

in Knappe. Petitioners do not demonstrate where Knappe discloses a gateway server, because it does not.

What Petitioner characterizes as “attorney argument” is applying the proper claim constructions for the subject claim language to the teachings of the prior art—the appropriate analysis under Section 103.

The ultimate judgment of obviousness under 35 U.S.C. § 103 is a legal determination based on underlying factual inquiries. “[T]he scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved.” *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17, 86 S.Ct. 684, 15 L.Ed.2d 545 (1966)....

In cases where “the question is whether a patent claiming the combination of elements of prior art is obvious,” “it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 417–18, 127 S.Ct. 1727, 167 L.Ed.2d 705 (2007).

Intel Corp. v. Qualcomm Inc., 21 F.4th 784, 794 (Fed. Cir. 2021)

With respect to the inventor, Mr. Dye, 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. As set forth in the Response, and not mere “attorney argument,” the gateway of Knappe is depicted in Fig. 1 of that disclosure, and at Knappe, 4:18-28. Knappe describes the gateway as performing the functions of converting analog to digital, VOIP and other protocols. It is not disclosed as a

server and is not a server. *See id.*

Conversely, a gateway server operates on a server-class computer and combines the functions of a gateway with server capabilities. It not only manages communications between diverse networks but also hosts applications, provides security features, and offers services such as caching, load balancing, or authentication. For example, gateway servers manage encryption, authentication, and authorization protocols to secure data transmission. Access control mechanisms ensure that only authorized users can join the conference, preventing unauthorized access. Exhibit 2001 (Dye Decl.) at ¶25.

This distinction is material in the context of the claims because “the gateway server establish[es] communication with a conferencing server” in accordance with claim 1, and “is operable to use the multicast group information to enable the telephone participant to participate in the multi-participant video conference.” ’997 Patent, claim 1. The simple gateway of Knappe is incapable of these complex operations. *See* Knappe, 4:29-57.

E. NEITHER KNAPPE NOR ELLIOTT DISCLOSE “THE TELEPHONE PARTICIPANT PROVIDING CONFERENCE ID INFORMATION;” LIMITATION OF INDEPENDENT CLAIM 1 (*PETITIONERS’ LIMITATION 1.5B*)

With respect to this limitation, Petitioners actually do make a claim construction argument relative to “conference ID information.” Tacitly acknowledging that “*conference* ID information” is absent from Elliott, Petitioners

argue that “conference ID information” can be satisfied by providing information about a sequence of point-to-point communications. That is inconsistent with the plain and ordinary meaning of “conference ID information,” which contemplates a conference ID, or identifier. In *Phillips*, the Federal Circuit reinforced the importance of construing claim terms in light of the surrounding claim language, such that words in a claim are not rendered superfluous. For example, when a claim refers to “steel baffles,” this “strongly implies that the term ‘baffles’ does not inherently mean objects made of steel.” *Id.*, 415 F.3d at 1314. Petitioners cannot direct the Board’s attention to this in Knappe, but only IDs for “specific one-to-one sessions.” Reply at 10.

F. NEITHER KNAPPE NOR ELLIOTT DISCLOSE “THE GATEWAY SERVER ESTABLISHING COMMUNICATION WITH A CONFERENCING SERVER;” LIMITATION OF INDEPENDENT CLAIM 1 (PETITIONERS’ LIMITATION 1.5C)

As set forth above, “gateway” and “gateway server” are different structures with different technical capabilities. The gateway of Knappe does not teach or suggest the claim element, and there is no evidence in the record that a POSITA would be motivated to replace a gateway with a gateway server as claimed. Patent Owner is not relying on a claim construction argument as Petitioners claim since a gateway server must be a server in accordance with the plain and ordinary meaning of the term. Patent claim terms should not be construed to render claim terms

superfluous, as Petitioners would do here. *Digital-Vending Services International, LLC v. University of Phoenix, Inc.*, 672 F.3d 1270, 1275 (Fed. Cir. 2012). Because there is no “gateway server” in the claimed combination, this claim is valid over the prior art of record.

G. Knappe Does Not Disclose the “Authenticating the Telephone Participant;” Limitation of Independent Claim 1 (*Petitioners’ Limitation 1.5D*)

Petitioners ignore well known terms in the art with respect to this limitation, including the difference between identifying and authenticating as used in the intrinsic record.

As set forth in the ’997 Patent, claim 1, a telephone participant “provides conference ID information” and then in accordance with this element, that party is authenticated, to maintain the integrity of the conference. ’997 Patent, 6:18-20 (“A virtual private network bridge 407 is used to connect local and remote clients together within a secure private network.”) The VPN bridge is used to authenticate clients. *Id.* at 6:58-59. The telephone number does not meet the authentication step—otherwise there would be no authentication step disclosed in the specification

or claim.

H. NEITHER KNAPPE NOR DE MORAES NOR ELLIOTT DISCLOSE THE “WHEREIN THE GATEWAY SERVER IS OPERABLE TO USE THE MULTICAST GROUP INFORMATION TO ENABLE THE TELEPHONE PARTICIPANT TO PARTICIPATE IN THE MULTI-PARTICIPANT VIDEO CONFERENCE.” LIMITATION OF INDEPENDENT CLAIM 1 (*PETITIONERS’ LIMITATION 1.6*)

As a preliminary matter, Petitioners’ argument that Patent Owner’s position “fails as a matter of law” is itself a legally incorrect statement. Section 316(e) provides that “the petitioner shall have the burden of proving a proposition of unpatentability.” The Petitioners have not demonstrated that any of Knappe, Elliott or De Moraes teach a “gateway server.” Petitioners’ own statements confirm that Elliott, at best, teaches an elementary “gateway.” Reply at 13.

Petitioners then repeat their untenable position that it is somehow improper for Patent Holder to point out the shortcomings of, and inconsistency with the invention of, Elliott, on which they would rely. Reply at 14. Petitioners implicitly acknowledge that Patent Holder is correct that “participant workstations of de Moraes used ‘audio coding hardware plus software for compression’” Response at 24; Reply at 14. As such, de Moraes cannot be applied to PSTN telephones.

As set forth above, neither Knappe nor Elliott teach a gateway server. Petitioners’ only identification is that of a gateway, not a gateway server. Taken together, they do not—as much as Petitioners’ view appears to be that the sum of the

parts of the combination converts into a system coextensive with the claim despite the shortcomings of each. Petitioners' arguments that attacking the references individually is somehow improper is only sensible where the combination would suggest something that each does not individually, which is not the case here. On the contrary, De Moraes's teaching is inconsistent with the PSTN network or PSTN telephones. As set forth in De Moraes, "A participating workstation should have audio coding hardware plus software for compression to 32-Kb/sADPCM,13-Kb/sGSM,or 4.8 Kb/s LPC."

I. NEITHER KNAPPE NOR DE MORAES NOR SHEPHERD DISCLOSE THE "THE METHOD OF CLAIM 1, WHEREIN THE TELEPHONE PARTICIPANT PARTICIPATING IN THE MULTI-PARTICIPANT VIDEO CONFERENCE COMPRISES: ENCAPSULATING THE MULTICAST IP PACKET AS A UNICAST PACKET;" LIMITATION OF DEPENDENT CLAIM 2

Petitioners have made no effort to respond to Patent Owner's arguments regarding the "encapsulating" element of claim 2 and has opted to waive argument. As argued previously, De Moraes' discussion lacks analysis of the Public Switched Telephone Network (PSTN) or PSTN telephones, thereby omitting crucial information essential for understanding the transmission of multicast data within a hybrid network incorporating PSTN infrastructure. Moreover, De Moraes fails to address the inclusion of PSTN telephones capable of facilitating the transfer of multicast group address. Moreover, De Moraes' design fails to specify whether the

configuration of multicast IP packets occurs at the gateway.

Shepherd has no applicability to videoconferencing or conferencing, as it solely focuses on the transmission of multicast packets within a unicast network. Moreover, it fails to address the intricate process of handling data from PSTN telephones, which operate independently of the internet. This significant gap in Shepherd's scope underscores its lack of synergy with De Moraes or Knappe. The absence of any substantial connection to the videoconferencing domain, coupled with its disregard for essential aspects like PSTN data handling, diminishes Shepherd's applicability and motivation to be integrated with Knappe's framework.

The proposed technique of encapsulating the multicast IP packet as a unicast packet specifically pertains to PSTN telephones engaged in a conference call which Petitioners fail to disclose in Shepherd.

J. NEITHER KNAPPE NOR SHEPHERD DISCLOSE THE “TRANSMITTING THE UNICAST PACKET OVER THE VIRTUAL PRIVATE NETWORKS ACROSS THE INTERNET BETWEEN ONE OR MORE APPLIANCES;” LIMITATION OF DEPENDENT CLAIM 2 (*PETITIONERS’ LIMITATION 2.5*)

In an IPR, the petitioner carries the ultimate burden of persuasion on invalidity, which never shifts to the patent owner except in special circumstances. *Medtronic, Inc. v. Teleflex Innovations S.A.R.L.*, 68 F.4th 1298, 1303 (Fed. Cir. 2023); This requirement is mandated under 35 U.S.C. S 316(e), which stipulates that

the petitioner must prove unpatentability by a preponderance of the evidence.

Petitioners claim that Patent Owner has not argued that Knappe does not meet this element—though they choose to paraphrase it improperly to simply “handling of data from a PSTN network.” Reply at 16. The element is not handling, it is “transmitting the unicast packet over the Virtual Private Networks across the Internet between one or more appliances.” This element is not taught or suggested by Knappe.

Shepherd is addressed at length in the Response. Knappe is similarly deficient, insofar as it does not teach the subject messaging, which Petitioners concede. Reply at 16-17. Instead, Petitioners hobble together a nearly unparseable argument as follows:

The teachings of de Moraes, regarding the use of multicast IP addressing for video conferences, and Shepard, regarding delivering IP multicast messages such as those disclosed by de Moraes over a unicast network, would have been considered by a POSITA in order to “reduce costs borne by the content provider to deliver content to destination devices” according to Knappe. Pet. at 34.

Response at 16-17. There is no explanation about why the claimed messaging would “reduce costs,” or why a POSITA would know that they would, or why a POSITA would choose the claimed methodology when applying inconsistent references in

the form of de Moraes, Shepard and Knappe.

K. NEITHER KNAPPE NOR SHEPHERD NOR DE MORAES DISCLOSE “ONE OR MORE OF THE APPLIANCES DETERMINING THE MULTICAST DATA FROM THE UNICAST PACKET” OF DEPENDENT CLAIM 2 (*PETITIONERS’ LIMITATION 2.6*)

Neither De Moraes nor Shepherd teach the determination of multicast data from unicast data performed by communication devices at the user end. To the extent performed in their disparate systems, any determination of multicast data is performed by routers positioned between end user devices or communication devices (16).

L. NEITHER KNAPPE NOR SHEPHERD NOR DE MORAES DISCLOSE “THE APPLIANCES PROVIDING THE MULTICAST DATA TO EACH OF THE OTHER PARTICIPANTS IN THE GROUP ADDRESS.” LIMITATION OF DEPENDENT CLAIM 2 (*PETITIONER’S LIMITATION 2.7*)

Firstly, De Moraes' discussion fails to encompass the PSTN network or PSTN telephones, omitting crucial information regarding the transmission of multicast data within a network that incorporates the PSTN infrastructure.

Secondly, Shepherd focuses on the delivery and reception of multicast content across unicast networks, addressing the challenge of enabling destination devices in a computer network to receive content delivered as multicast packets. In this system, a destination device intending to join a multicast group associated with specific content sends a multicast join message to a local router. If the attempt to join the

multicast group fails due to non-multicast-enabled routes, the destination device can send a unicast request message marked for interception by intermediate network devices like multicast-enabled routers.

Shepherd is not directed to videoconferencing or conferencing. Moreover, it fails to address the intricate process of handling data from PSTN telephones, which operate independently of the internet. This significant gap in Shepherd's scope underscores its lack of synergy with Knappe. The absence of any substantial connection to the videoconferencing domain, coupled with its disregard for essential aspects like PSTN data handling, diminishes Shepherd's applicability and motivation to be integrated with Knappe's framework.

According to Petitioners, in claim 1, communication devices (16) are classified as appliances. Neither De Moraes nor Shepherd teach the determination of multicast data from unicast data performed by communication devices at the user end. Instead, both sources refer to routers for this purpose, positioning them somewhere between end user devices or communication devices (16). Hence, both De Moraes and Shepherd fail to disclose this element.

M. DE MORAES DOES NOT DISCLOSE THE “CONFIGURING THE IP PACKET WITH A GROUP ADDRESS ACCORDING TO A MULTICAST PROTOCOL TO CREATE A MULTICAST IP PACKET.” LIMITATION OF DEPENDENT CLAIM 7 (*PETITIONERS’ LIMITATION 2.8*)

De Moraes excludes the Public Switched Telephone Network (PSTN) or

PSTN telephones, thereby omitting crucial information essential for understanding the transmission of multicast data within a network incorporating PSTN infrastructure. Specifically, De Moraes fails to address the inclusion of PSTN telephones capable of facilitating the transfer of multicast group address. Moreover, De Moraes' design fails to specify whether the configuration of multicast IP packets occurs at the gateway.

In summary, De Moraes does not teach multicast's potential utility in incorporating PSTN telephones into conference calls.

III. 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 '997 Patent claims. For at least the foregoing reasons, the Petition's grounds for unpatentability are legally deficient and claims 1-10 of the '997 Patent should be confirmed under 35 U.S.C. § 316.

Date: February 23, 2024

Respectfully submitted,

/s/ Andrew G. DiNovo

Andrew G. DiNovo

Reg. No. 40,115

DiNovo Price LLP

7000 North MoPac Expressway

Suite 350

Austin, TX 78731

Telephone: (512) 539-2632

Facsimile: (512) 727-6691

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 3,455 words, as measured by the Word Count function of Word 2007. 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
Andrew G. DiNovo

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:

Hector J. Ribera
C.J. Alice Chuang
Carolyn Chang
Ryan J. Marton
Marton Ribera Schumann & Chang LLP
548 Market St., Suite 36117
San Francisco, CA 94104
hector@martonribera.com
cjalice@martonribera.com
carolyn@martonribera.com
ryan@martonribera.com

/s/ Andrew G. DiNovo

Andrew G. DiNovo
Reg. No. 40,115
DiNovo Price LLP
7000 North MoPac Expressway
Suite 350
Austin, Texas 78731