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)
Case IPR2023-00377 (Patent 9,253,332)
Case IPR2023-00378 (Patent 9,094,525)
Case IPR2023-00379 (Patent 9,094,525)
Case IPR2023-00380 (Patent 9,843,612)
Case IPR2023-00382 (Patent 9,843,612)

DECLARATION OF THOMAS DYE IN SUPPORT OF PATENT OWNER'S RESPONSE UNDER 37 C.F.R. § 42.120

I. INTRODUCTION

1. My name is Thomas Dye and I have been retained on behalf of Meetrix IP, LLC ("Patent Owner" or "Meetrix"), and its counsel, DiNovo Price LLP, as an expert in this proceeding. I am personally knowledgeable about the matters stated herein.

II. BACKGROUND AND QUALIFICATIONS

2. I am an expert in network technologies. I have a B.S. degree in Electrical Engineering and Computer Science from Michigan State University. I have worked in the technology arena, specifically in the field of network technologies and software, for over 30 years. A copy of my resume and curriculum vitae is attached as **Attachment A**.

III. PERSON OF ORDINARY SKILL IN THE ART

3. In my opinion, a person having ordinary skill in the art ("POSITA") would have had at least a bachelor's degree in electrical engineering or computer science in addition to at least two years of industry experience two years or more of experience in computing systems development.

4. I understand that Petitioner proposes that a POSITA to be that who would have held either a bachelor's degree in computer science, computer engineering or an equivalent with three years of experience relating to conferencing systems in packet based networks. I do not agree with this proposition because such

a field is too narrow and limiting to the technology of the patents at issue in this matter. My opinion of a POSITA is more accurate given that I was a named inventor and qualified POSITA at the time of the patent applications for the respective Patents-in-Suit.

IV. PATENTS IN SUIT AND PRIOR ART REFERENCES

5. I am a named inventor on each of the patents at issue in this proceeding which include: United States Patent Nos. 8,339,997 (the "'997 Patent"); 9,094,525 (the "'525 Patent"); 9,253,332 (the "'332 Patent") and 9,843,612 (the "'612 Patent") (collectively "Patents-at-Suit").

6. Generally, the Patents-at-Suit teach systems and methods of achieving multi-participant, audio/video conferencing, over the Internet, using secure connections and multicasting.

7. Figure 3 provides a general example of the patented technology depicting "audio video and data collaboration information to be securely transferred between a plurality of local and remote clients preferably within a virtual private network." '612 Patent, 4:53-57.

8. The Patents-in-Suit teach "a decentralized model for multipoint conferencing…mix[ing] media streams at each terminal prior to multicast." '612 Patent, 4:47-53. Figure 6 is another illustrative example showing the local client data mixed at the moderator. This differentiated mixing is performed to avoid

significant negative repercussions, including low bandwidth bottlenecks and feedback and "long latencies with limited bandwidth, resulting in jerky video, dropped audio and loss of lipsync." '612 Patent, 1:33-36.

9. I have also reviewed the prior art references which Petitioner has referenced in this proceeding.

Elliot Reference

10. I have reviewed U.S. Patent No. 6,690,654 ("Elliot"). Elliot teaches an improvement on "call center" technology. Elliot teaches the use of PSTN for talking point-to-point, plus sharing a computer program *separately* so that the call participants can view a website. However, Elliot teaches collaboration with independent forms of communication without convergence or mixing. Additionally, when it comes to collaboration, the scope is confined to sharing and browsing multimedia solely between the call center and each respective remote party, maintaining a distinct and separate collaborative environment for each party.

11. 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.

Drell Reference

12. I have reviewed U.S. Patent No. 7,089,285 ("Drell"). 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".

13. Drell does not teach a secure means of provisioning multimedia conferencing over a public network using secure networking technology like the Patents-in-Suit.

Knappe Reference

14. I have reviewed U.S. Patent No. 7,180,997 ("Knappe"). Knappe seeks to solve a problem in the art related to audio quality on traditional conference calls. Knappe is directed to "enhancing" the quality of the moderator's audio communication relative to subordinate participants.

15. Knappe neither discloses VPN tunneling nor any other secured form of communication. Knappe does not mix voice signals as claimed.

"VPN Textbook"

16. I have reviewed the excerpts of "VPN Textbook" included by Petitioner. This cited prior art is a general purpose textbook describing the existence of and general implementation concepts relating to the implementation of VPNs.

17. As this text involves general teachings of implementing secure network technologies, it does not disclose specifics related to the patented

inventions of the Patents-in-Suit. It appears to me that Petitioner uses VPN Textbook as a catch-all, arguing that anything in the textbook can be extracted to recreate the inventive system, using the claims as a template with hindsight bias.

Combination References

18. Petitioner suggests that a POSITA would combine Elliot with Knappe to resolve the claims of the Patents-in-Suit. I disagree. Elliot discloses a system and method for efficient communication with multiple remote parties separated by a network, enabling multimedia collaboration. Knappe teaches a method for facilitating a conference or video or audio conferencing between communication devices including PSTN clients via a network.

19. Elliot mentions a VPN in passing but does not teach or suggest using a VPN for audio signals or calls between multiple parties. Knappe presents a conference call configuration involving numerous participants 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 discloses two independent one-to-one calls, wherein data (audio) from one participant is transmitted to the call center only and not transmitted to any third user/participant. Due to this fundamental difference, a POSITA would lack any motivation to combine Elliot with Knappe.

20. Nor would a POSITA combine Drell with Knappe to achieve the

technology disclosed in the Patents-in-Suit. Neither Drell nor Knappe reflect or disclose an understanding of the requirements of the different mixers or would teach or suggest this to a POSITA.

21. In an apparent effort to show the presence of the VPN tunnel as claimed, Petitioner combines Elliot 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 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.

22. A VPN—a private network of securely connected appliances configured within a public network—cannot be implemented over PSTN. Moreover, there would be no motivation to protect a direct PSTN connection in the manner claimed, given the disparate network technologies.

23. Elliot discloses an improvement with 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 involving independent connections, the discussion in Elliott related to VPNs is never in relation to mixed audio as claimed.

24. Neither Knappe nor Elliot disclose collaboration data as a distinct set

of data from video and audio. Elliot only discloses pushing URLs or applets to clients using standard Internet techniques. Elliot, 3:13-39. Knappe teaching is limited to video and audio. 5:40-48. A POSITA would not assume that "data" should or would be replaced with the claimed "collaboration data."

25. Further Petitioner argues that the "gateway" disclosed in Knappe is the same structure as the gateway server in the '997 Patent. I disagree. A POSITA understands the gateway as described in Knappe as performing the functions of merely converting an analog signal to a digital signal, VOIP and other protocols. However, it is not a gateway server as disclosed in the '997 Patent. A gateway server as claimed in the '997 Patent enhances traditional gateway functionality by incorporating server-related services and applications into its role.

26. 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 either Drell's or Knappe's concepts with Elliot's is inherently improper, as the systems have different objectives. In Elliot, secure audio/video data remains between the end user and call center. Hence, a POSITA would not be motivated to combine Elliot with Drell or Knappe.

I swear under penalty of perjury that the foregoing is true and correct.

Executed on this 16th day of October 2023.

By: Thomas A Dye
Thomas Dye

THOMAS A. DYE

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SUMMARY

C-level executive and Entrepreneur with proven leadership in business, sales and technical management. Experienced professional responsible for all operations in multiple million dollar SaaS based technology corporations including equity-based, private and public capitalization with IPO exits and acquisitions by publicly traded companies. Multiple public awards for achievements and Inventor of 55 issued technology and business patents. Strengths include VC funding, IRR, C-level team building, corporate formation and strategy, equity negotiations and agreements, budget and operations management, technology innovation, intellectual property protection, cloud-based application platforms, marketing, sales and customer acquisition strategies for successful corporate exits.

SELECTED ACHIEVEMENTS

- As CTO of Arva Intelligence Inc. defined architected and built ML based Python web-application platform to predictively model seed genetics for suppliers in the Agriculture Industry.
- As CEO/founder of MyTurf Inc. implemented and ran SaaS based advertising/marketing platform for over 2 million users that placed and tracked online advertising at the networks edge.
- As CEO/co-founder of Meetrix Inc., orchestrated successful exit for SaaS technology platform used to deliver multi-party, secure, audio/video/collaboration over open Internet to CopyTele Inc. (ITUS-Public Co.).
- Successfully raised $23 million in A, B & C rounds of funding as CTO/CEO of ISI Inc., a fabless semiconductor and software DE-C corporation.
- Original Board member and equity advisor at PERK.com raised initial seed funding and helped grow revenue to $60mm/month for successful IPO exit and subsequential acquisition by RhythmOne LTD.
- As CEO/Founder at Austek, a fabless Semiconductor corporation, Orchestrated successfully sale to Cirrus Logic Inc., a fortune 500 company, after winning "The Best of Comdex" award.
- As CEO/Founder and BOD advisor for multiple early stage corporations, successfully raised over $64 million in seed through series-C equity funding for various early stage start-up corporations.
- As inventor, awarded 55 patents pertaining to novel technologies and business methods specifically for SaaS, media, ad-exchanges, video and voice over IP, digital media streaming, data synchronization, network protocols and graphics processing, microprocessor architecture, memory systems architectures, data protection and compression algorithms mostly implemented in fabless semiconductor start-up companies.

PROFESSIONAL EXPERIENCE

ARVA INTELLIGENE INC., Austin, Texas **2019 – Present**
As CTO, Authored and submitted four patents to the US-PTO for IP protection in AI based Machine Learning platform used to analyze CO2 carbon sequestration potentials at large scale.

MYTURF INC., Austin, Texas **2010 – 2018**
As CEO/Founder of MyTurf Inc. defined business model, market requirements, managed funding, ran start-up operations, built patent protection, partner and sales agreements for over 2 million users.

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MEETRIX IP, LLC - EXHIBIT 2001

MEETRIX INC., Austin, Texas **2002-2010**
As CEO/Founder managed global business operations, sales, marketing and R&D, for novel network based hardware/software solution providing secure, multi-party Audio, Video & VoIP communications.

INTERACTIVE SILICON INC., Austin, Texas **1997-2002**
As CEO/Founder secured three-up rounds of funding, started and led operations, negotiated agreements, with Dell, Compaq and HP for embedded semiconductors for PC systems. Dell Computer Corp. led the series B round.

AUSTEK MICROSYSTEMS INC., Austin, Texas **1993-1996**
CEO/Founder for fabless semiconductor company a start-up that won the "Best of Comdex" for PC based "single-chip" 3D game accelerator. Sold to Cirrus Logic Inc. a fortune 500 company.

DYE CONSULTING, Austin, Texas **2005 – Present**
Owner and president of business and technical consulting company for early stage equity based start-ups looking to secure funding and understanding the ins and outs of IP protection, funding documents, customer acquisition and market requirement assessment.

EDUCATION

BSEE, Minor-Computer Science, *Michigan State University*, East Lansing, MI.
Technical Degree, *Capital Area Career Center*, Mason, MI

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MEETRIX IP, LLC - EXHIBIT 2001