IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

VOXER, INC. AND VOXER IP LLC,	)	
	)	
Plaintiffs,	)	C.A. No. 25-cv-872 (GBW)
	)	
v.	)	
	)	
GOOGLE LLC AND YOUTUBE, LLC,	)	
	)	
Defendants.	)	

DEFENDANTS' INVALIDITY CONTENTIONS

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I. INTRODUCTION

Pursuant to the Scheduling Order entered by the Court on January 8, 2026 (D.I. 36), Defendants Google LLC and YouTube, LLC (collectively, "Defendants") provide their initial invalidity contentions ("invalidity contentions").

Defendants' invalidity contentions address U.S. Patent Nos. 10,142,270 (the "'270 Patent"); 10,511,557 (the "'557 Patent"); 11,146,516 (the "'516 Patent"); 11,777,883 (the "'883 Patent"); and 11,658,929 (the "'929 Patent") (collectively, the "Asserted Patents"). Plaintiffs Voxer, Inc. and Voxer IP LLC (collectively, "Voxer" or "Plaintiffs") assert that Defendants infringe claims 34, 42, 43, 47, 48, 51, 55, 59, 66, 71, 76, 77, 113, and 124 of the '270 Patent; claims 1, 8, 9, 14, 15, 17, 18, 21, 69, 70, 78, 79, and 88 of the '557 Patent; claim 18 of the '516 Patent; claims 1, 4, and 16 of the '883 Patent; and claim 12 of the '929 Patent (collectively, the "Asserted Claims").

II. GENERAL RESERVATIONS

Defendants' invalidity contentions are subject to amendment and/or supplementation.

Defendants reserve the right to amend these contentions in response to any amendment or supplement to Voxer's infringement contentions, in response to Voxer's responses to these invalidity contentions (if any), in response to new information introduced in Voxer's expert reports and depositions, or if any other new information material to invalidity is introduced into this case. Defendants expressly reserve the right to amend these contentions in response to any new documents or deposition testimony material to invalidity produced by third-parties in response to subpoenas.[1]

[1] As of August 12, 2026, Defendants have served subpoenas on non-parties International Business Machines Corporation (IBM), Brad Hunstable, Molex, LLC, Ke-Qin Gu, Victor Okumoto, Adobe Inc., Vimeo.Com, Inc., Scott Flacks, Andy Wombwell, and Oren Levy. (D.I. 89.) Since August 7, 2026, Defendants have also been in the process of serving subpoenas on John Ham, Oridus Inc., Kuo-Chun Lee, Marc Canter, Hideki Kishioka, and Josh Harris.

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Prior art not included in this disclosure, whether or not known to Defendants, may become relevant. Defendants are currently unaware of the extent, if any, to which Voxer will contend that limitations of the Asserted Claims are not disclosed in the prior art identified by Defendants. Accordingly, Defendants reserve the right to identify other prior art that would disclose such limitation(s) and anticipate and/or render obvious any of the Asserted Claims, alone and/or in combination with identified or additional prior art. Further, Defendants reserve the right to rely on any reference, device, product, system, or other document or thing sought from and/or produced by Voxer or any third-party during discovery. Defendants also reserve the right to rely on any reference, system, or other prior art identified in the prosecution histories of the applications leading to the Asserted Patents (and related patents and/or patent applications) or otherwise identified in connection with this case.

To the extent that the contentions herein reflect constructions (express or implied) of claim limitations consistent with or implicit in Voxer's infringement contentions, no inference is intended, nor should any inference be drawn that Defendants agree with Voxer's infringement allegations or claim interpretations, and Defendants expressly reserve the right to contest such allegations and interpretations. Defendants offer these contentions in response to Voxer's infringement contentions and without prejudice to any position that Defendants may take as to any claim construction issues. Specifically, Defendants base these invalidity contentions at least in part upon the claim scope and certain claim constructions that have been implicitly or explicitly asserted by Voxer, and nothing herein should be construed as evidencing any express or implied agreement with any of Voxer's claim construction or infringement positions.

Defendants intend to rely on admissions concerning the scope of the prior art relevant to the Asserted Patents and/or applications; related patents and/or applications; the prosecution

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histories for the Asserted Patents, related patents, and/or patent applications (including all prior art cited therein); any deposition testimony of the named inventors on the Asserted Patents and related patents and/or patent applications; any deposition testimony of any third party prior artist; evidence and testimony relating to the level of ordinary skill in the art; and the papers filed and any evidence submitted by Voxer in connection with this case.

Defendants' claim charts cite to exemplary teachings and disclosures of the prior art as applied to features of the Asserted Claims. However, persons having ordinary skill in the art generally would view each prior art reference in the context of other publications, literature, products, and understanding. As such, the cited portions are merely exemplary, and Defendants reserve the right to rely on uncited portions of the prior art references and of other publications, expert testimony, and other evidence as aids in understanding and interpreting the cited portions, as providing context thereto, and as additional evidence that the prior art discloses a claim limitation or any of the Asserted Claims as a whole. Defendants further reserve the right to rely on uncited portions of the prior art references, other publications, and testimony, including expert testimony, to establish bases for combinations of certain cited references that render the Asserted Claims obvious.

The prior art identified below and discussed in the claim charts may disclose the elements of the Asserted Claims explicitly and/or inherently, and/or may be relied upon to show the state of the art in the relevant timeframe. The suggested obviousness combinations are provided in addition to and/or in the alternative to Defendants' anticipation contentions and are not to be construed to suggest that any reference included in the combinations is not by itself anticipatory. The combinations of prior art references identified in these invalidity contentions are exemplary. Defendants reserve the right to rely on any combination of any two or more prior art references,

in any permutation, to the extent that such prior art references are identified in Defendants' invalidity contentions or any amended or supplemental contentions. The rationale or motivations to combine the prior art references identified in these invalidity contentions are also exemplary. Defendants reserve the right to amend or supplement the rationale or motivation to combine the prior art references identified in these contentions.

The following contentions provide exemplary prior art citations, anticipation, and obviousness positions. The citations and discussion in the charts are organized by claim (and claim limitation) for convenience, but each limitation or claim section applies to the larger context of each claim, to any related dependent or independent claims, as well as all claims containing similar limitations or elements. For example, citations as to any recited limitation, step, or component in the claims apply wherever each such limitation, step, or component is repeated elsewhere in the claim or Asserted Patent. Where Defendants cite to a particular drawing or figure in the attached claim charts, the citation encompasses the description of the drawing or figure, as well as any text associated with the drawing or figure. Similarly, where Defendants cite to exemplary text concerning a drawing or figure, the citation encompasses that drawing or figure as well as any other text associated with the drawing or figure. Relatedly, certain portions of patent or other prior art disclosures build upon other disclosures, even if they are referred to as separate or alternative embodiments. Thus, Defendants' citations to structures or functions incorporate by reference all disclosures to related structures or functions, including any additional detail provided as to the operation or design of those structures or functions.

Defendants' invalidity positions in these contentions may be in the alternative and do not constitute any concession by Defendants for purposes of non-infringement. *See, e.g.*, *Vanmoor v. Wal-Mart Stores, Inc.*, 201 F.3d 1363, 1366 (Fed. Cir. 2000).

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Furthermore, these contentions are provided without prejudice to Defendants' right to introduce at trial any subsequently discovered evidence or expert opinions relating to known facts and to produce and introduce at trial all evidence, whenever discovered, relating to the proof of subsequently discovered facts. Moreover, facts, documents and things now known may be imperfectly understood and, accordingly, such facts, documents and things may not be included in the following contentions. Defendants reserve the right to refer to, conduct discovery with reference to, or offer into evidence at the time of trial, any and all facts, expert opinion testimony, documents and things notwithstanding the written statements herein. Defendants further reserve their right to refer to, conduct discovery with reference to, or offer into evidence at the time of trial, any and all facts, documents and things that are not currently recalled but might be recalled at some time in the future.

Defendants object to the disclosure of information that is protected by the attorney-client privilege, the attorney work-product immunity, the common interest privilege or any other applicable privilege or immunity. To the extent that Defendants inadvertently disclose information that may be protected from discovery under the attorney-client privilege, the attorney work-product immunity, the common interest privilege or any other applicable privilege or immunity, such inadvertent disclosure does not constitute a waiver of any such privilege or immunity.

The information set forth below is provided without waiving: (1) the right to object to the use of any statement for any purpose, in this action or any other action, on the grounds of privilege, relevance, materiality or any other appropriate grounds; (2) the right to object to any request involving or relating to the subject matter of the statements herein; or (3) the right to revise, correct, supplement or clarify any of the statements provided below at any time.

Defendants also reserve the right to challenge any of the claim terms herein under 35 U.S.C. § 112 beyond the grounds outlined in these invalidity contentions and in accordance with any scheduling order entered by the Court. Nothing stated herein shall be construed as a waiver of any argument available under 35 U.S.C. §§ 101, 102, 103, 112 and/or 305.

Defendants' invalidity contentions are based on Voxer's apparent interpretation of the claims as set forth in its infringement contentions. Defendants reserve the right to take different interpretations of the claims and/or to amend their invalidity contentions, including the 102, 103, and 112 arguments presented, in view of claim construction proceedings, Voxer's arguments and the USPTO's decisions in the IPRs, and/or any modifications or clarifications to the way in which Voxer seeks to interpret the Asserted Claims.

III. PERSON OF ORDINARY SKILL IN THE ART

Based on Voxer's interpretation of the Asserted Patents to date and based on Defendants' reasonable investigation to date, Defendants contend that a person of ordinary skill in the art ("POSITA") at the time of the alleged invention of the Asserted Patents would have had at least (1) a Bachelor's degree in electrical or computer engineering or a related course of study with at least two years of work experience in industry in the areas of computer networking, multimedia processing, or a related area of work or (2) a Master's degree in electrical or computer engineering or a related course of study, with at least one year of experience in industry in the areas of computer networking, multimedia processing, or a related area of work. A higher level of education could substitute for less industry experience, and more industry experience could substitute for the specific level of education.

IV. IDENTIFICATION OF RELEVANT PRIOR ART

A. Priority Dates

These Preliminary Invalidity Contentions are based on the earliest priority dates as identified by Plaintiffs in their July 30 Supplemental Response to Defendants' Common Interrogatory No. 2. Nothing in these Preliminary Invalidity Contentions should be understood as an agreement that any Asserted Claim is entitled to claim priority to the dates identified by Plaintiffs, or to any continuation-in-part, provisional, or foreign priority documents.

Defendants disagree that the asserted claims of the asserted patents are entitled to Voxer's alleged priority dates. Voxer bears the burden of establishing entitlement to the asserted priority dates and it has not done so to date. For example, Voxer has not produced sufficient documents evidencing conception and reduction to practice of the Asserted Claims. Nor has Voxer demonstrated that the Asserted Claims have written description or enablement support in the provisional applications identified on the face of the Asserted Patents (i.e., U.S. Provisional Patent Application No. 60/937,552 (filed June 28, 2007) ("'552 Provisional") and U.S. Provisional Patent Application No. 60/999,619 (filed October 19, 2007) ("'619 Provisional")), such that any Asserted Claim is entitled to claim priority to the filing date of any such provisional application. For example, neither the '552 Provisional nor the '619 Provisional provides adequate written description for the claim limitation appearing in all asserted claims: "without having to first establish an end-to-end connection over the network"/ "without first setting up an end-to-end connection over the network." As an additional example, neither the '552 Provisional nor the '619 Provisional enable the transmission of a "video message" or "video media" as required by all Asserted Claims.

Any reference to an "asserted priority date" in these Preliminary Invalidity Contentions refers to the priority dates asserted in Plaintiffs' July 30 Supplemental Response to Defendants'

Common Interrogatory No. 2. Reference to a "priority date" or an "asserted priority date" should not be construed to mean that Defendants agree that any of the Asserted Patents are in fact entitled to such a priority date, or that Plaintiffs have provided proper notice as to their contentions for a priority date. To the extent Plaintiffs allege that any prior art relied on in these Preliminary Invalidity Contentions does not actually qualify as prior art to an Asserted Patent, Defendants reserve the right to rebut those allegations (e.g., by demonstrating an earlier critical date for the challenged prior art and/or a later priority date for a particular Asserted Patent and/or Asserted Claim).[2] Although the prior art identified herein accounts for Voxer's presently alleged priority dates, Defendants expressly reserve all rights to rely on additional prior art if any asserted claims are determined not entitled to those dates, including, without limitation, prior versions of YouTube Live that operated in substantially the same manner as the relevant accused functionality does today.

1. '270 Patent

Voxer has asserted the following priority dates for the asserted claims of the '270 Patent through its interrogatory responses:

- No earlier than June 28, 2007 (*i.e.*, the filing date of U.S. Provisional Patent Application No. 60/937,552) for claims 34, 42, 43, 47, 51, 55, 59, 66, 71, 76, 77, 113, and 124;
- No earlier than October 19, 2007 (*i.e.*, the filing date of U.S. Provisional Patent Application No. 60/999,619) for claim 48.

[2] Defendants reserve the right to rely on additional documents and evidence to rebut any efforts by Plaintiffs to allege any reference was not publicly available or otherwise available as prior art.

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(*See* Voxer's First Supplemental Response to Common Interrogatory No. 2, dated July 30, 2026 at 13.)

The '552 and '619 Provisionals do not disclose all limitations of the asserted claims of the '270 Patent. For example, the '552 and '619 Provisionals fail to enable or provide written description for at least the following claim terms: "identifier" / "identifier information" (all asserted claims); "video communication" / "portions of the video communication" (all asserted claims); "location[s] [on the network]" (all asserted claims); "broadcast" (claims 71 and 124); "without having to first establish an end-to-end connection over the network" (all asserted claims); "plurality of servers cooperating" (claim 47); "video service infrastructure" (claim 55); "conversation thread" / "conversation initiated by the video communication" (claims 77, 113, 124); "arranging to provide an application" (claim 66); "exchange messages in response to the video message" (claim 77); and "video media" (claim 113). The asserted claims of the '270 Patent are thus not entitled to the priority dates of the '552 and '619 Provisionals.

2. '557 Patent

Voxer has asserted a priority date of no earlier than October 19, 2007 (*i.e.*, the filing date of U.S. Provisional Patent Application No. 60/999,619) for all asserted claims of the '557 Patent through its interrogatory responses. (*See* Voxer's First Supplemental Response to Common Interrogatory No. 2, dated July 30, 2026 at 13.)

The '619 Provisional does not disclose all limitations of the asserted claims of the '557 Patent. For example, the '619 Provisional fails to enable or provide written description for at least the following claim terms: "identifier" (claims 69-70, 78-79, 88); "video message" / "video media of the video message" (all asserted claims); "ascertained bandwidth" (all asserted claims); "without having to first establish an end-to-end connection over the network" (all asserted claims); "video message service infrastructure" (all asserted claims); "providing an application for

execution" (claims 17, 18); "conversation thread" / "thread of messages" (claims 70, 88); and "exchange second messages in response to the video message" (claims 70, 88). The asserted claims of the '557 Patent are thus not entitled to the priority date of the '619 Provisional.

3. '516 Patent

Voxer has asserted a priority date of no earlier than October 19, 2007 (*i.e.*, the filing date of U.S. Provisional Patent Application No. 60/999,619) for claim 18 of the '516 Patent through its interrogatory responses. (*See* Voxer's First Supplemental Response to Common Interrogatory No. 2, dated July 30, 2026 at 14.)

The '619 Provisional does not disclose all limitations of claim 18 of the '516 Patent. For example, the '619 Provisional fails to enable or provide written description for at least the following claim terms: "identifiers" (all asserted claims); "locations on the network" (all asserted claims); "video message service infrastructure" (all asserted claims); "segmented into a plurality of segments" (all asserted claims); "video message" (all asserted claims); "plurality of servers collectively configured" (all asserted claims); and "without having to first establish an end-to-end connection over the network" (all asserted claims). Claim 18 of the '516 Patent is thus not entitled to the priority date of the '619 Provisional.

4. '883 Patent

Voxer has asserted the following priority dates for the asserted claims of the '883 Patent through its interrogatory responses:

- No earlier than June 28, 2007 (*i.e.*, the filing date of U.S. Provisional Patent Application No. 60/937,552) for claims 1 and 4;
- No earlier than October 19, 2007 (*i.e.*, the filing date of U.S. Provisional Patent Application No. 60/999,619) for claim 16.

(*See* Voxer's First Supplemental Response to Common Interrogatory No. 2, dated July 30, 2026 at 14.)

The '552 and '619 Provisionals do not disclose all limitations of the asserted claims of the '883 Patent. For example, the '552 and '619 Provisionals fail to enable or provide written description for at least the following claim terms: "video message" / "video media" (all asserted claims); "information from a first client device used by an initiating participant, the information for forwarding video media of a video message" (claims 1, 4); "multi-media conversation" (claims 1, 4); "ascertained bandwidth" (claim 16); "selectively add to the multi-media conversation one or more additional messages that are generated in response to the video message" (claims 1, 4); "communication infrastructure" / "video message service infrastructure" (all asserted claims); and "without first setting up an end-to-end connection over the network" / "without having to first establish an end-to-end connection over the network" (all asserted claims). The asserted claims of the '883 Patent are thus not entitled to the priority dates of the '552 and '619 Provisionals.

5. '929 Patent

Voxer has asserted a priority date of no earlier than June 28, 2007 (*i.e.*, the filing date of U.S. Provisional Patent Application No. 60/937,552) for claim 12 of the '929 Patent through its interrogatory responses. (*See* Voxer's First Supplemental Response to Common Interrogatory No. 2, dated July 30, 2026 at 14.)

The '552 Provisional does not disclose all limitations of the asserted claims of the '929 Patent. For example, the '552 Provisional fails to enable or provide written description for the following claim terms: "video message" / "video media" (all asserted claims); "information usable by the communication infrastructure for determining and notifying one or more second users of the communication infrastructure" (all asserted claims); "multi-media messaging conversation" (all asserted claims); "communication infrastructure including a plurality of servers on a network"

(all asserted claims); and "without having to first establish an end-to-end connection over the network" (all asserted claims). The asserted claims of the '929 Patent are thus not entitled to the priority date of the '552 Provisional.

B. Prior Art Patent Publications and Systems

The below-identified patent publications and systems (hereinafter "references") are prior art under at least 35 U.S.C. §§ 102(a), (b), (e), (f), and/or (g) and anticipate and/or render obvious the Asserted Claims of the Asserted Patents. In accordance with the parties' Scheduling Order, Defendants have elected no more than 40 references.

1. Patent Publications

The Asserted Claims are invalid under 35 U.S.C. §§ 102 and/or 103 based on the patent publications identified below, alone or in combination with one another and/or the prior art systems identified in Section IV.B.2. These patent publications constitute prior art under 35 U.S.C. § 102, and their patent numbers, countries of origin, and dates of publication and/or issue are included on the face of those documents. Defendants reserve the right to amend and/or supplement this list as they learn of other prior art patent publications that would anticipate and/or render obvious the Asserted Claims.

1. U.S. Patent No. 6,389,473, titled "Network Media Streaming," issued on May 14, 2002, and having a filing date of March 24, 1999 ("**Carmel**").

2. U.S. Patent No. 6,421,706, titled "Multicast and Unicast Internet Protocol Content Distribution Having a Feedback Mechanism for Real-time and Store and Forward Information Transfer," issued on July 16, 2002, and having a filing date of February 25, 1998 ("**McNeill**").

3. U.S. Patent No. 6,795,863, titled "System, Device and Method for Combining Streaming Video with E-Mail," issued on September 21, 2004, and having a filing date of August 10, 2000 ("**Doty**").

4. U.S. Patent No. 7,339,993, titled "Methods for Transforming Streaming Video Data," issued on March 4, 2008, and having a filing date of February 10, 2000 ("**Brooks**").

5. U.S. Patent No. 7,860,994, titled "System and Method for Remote Data Acquisition and Distribution," issued on December 28, 2010, and having a filing date of January 16, 2007 ("**Rensin 994**").

6. U.S. Patent No. 8,671,210, titled "Methods, Devices, Systems, and Computer Program Products for Managing and Delivering a Live Media Stream," issued on March 11, 2014, and having a filing date of May 7, 2007 ("**Branam**").

7. U.S. Patent No. 9,762,861, titled "Telepresence via Wireless Streaming Multicast," issued on September 12, 2017, and having a filing date of December 5, 2006 ("**Kalaboukis**").

8. International PCT Publication No. WO 01/41393 A2, titled "Global messaging with distributed adaptive streaming control," published June 7, 2001, and having a filing date of December 5, 2000 ("**Lee 393**").

9. U.S. Patent Application Publication No. 2003/0041165 A1, titled "System and Method for Group Video Teleconferencing Using a Bandwidth Optimizer," published on February 27, 2003, and having a filing date of October 23, 2001 ("**Spencer**").

10. U.S. Patent Application Publication No. 2004/0002049 A1, titled "Computer Network-Based Interactive, Multimedia Learning System and Process," published on January 1, 2004, and having a filing date of February 21, 2003 ("**Beavers**").

11. U.S. Patent Application Publication No. 2004/0230659 A1, titled "Systems and Methods of Media Messaging," published on November 18, 2004, and having a filing date of March 12, 2004 ("**Chase**").

12. U.S. Patent Application Publication No. 2005/0138560 A1, titled "Method and Apparatus for Broadcasting Live Personal Performances Over the Internet," published on June 23, 2005, and having a filing date of December 18, 2003 ("**Lee 560**").

13. U.S. Patent Application Publication No. 2005/0210393 A1, titled "Asynchronous Collaboration via Audio/Video Annotation," published on September 22, 2005, and having a filing date of May 16, 2005 ("**Maeng**").

14. U.S. Patent Application Publication No. 2005/0210394 A1, titled "Method for Providing Concurrent Audio-Video and Audio Instant Messaging Sessions," published on September 22, 2005, and having a filing date of March 14, 2005 ("**Crandall**").

15. U.S. Patent Application Publication No. 2005/0262530 A1, titled "Systems and Methods for Multimedia Communication," published on November 24, 2005, and having a filing date of May 24, 2004 ("**Ruetschi**").

16. International PCT Publication No. WO 2006/058544 A1, titled "Method for Delivering Multimedia Files," published on June 8, 2006, and having an international filing date of November 30, 2004 ("**Hundscheidt**").

17. U.S. Patent Application Publication No. 2006/0156330 A1, titled "Intelligent Interactive Multimedia," published on July 13, 2006, and having a filing date of January 7, 2005 ("**Chiu 330**").

18. U.S. Patent Application Publication No. 2006/0259923 A1, titled "Interactive Multimedia Interface Display," published on November 16, 2006, and having a filing date of May 12, 2005 ("**Chiu 923**").

19. U.S. Patent Application Publication No. 2007/0050452 A1, titled "System and Method for Online Lobby," published on March 1, 2007, and having a filing date of March 27, 2006 ("**Raju**").

20. U.S. Patent Application Publication No. 2007/0162487 A1, titled "Multi-Format Data Coding, Managing and Distributing System and Method," published on July 12, 2007, and having a filing date of December 30, 2005 ("**Frailey**").

21. U.S. Patent Application Publication No. 2007/0180135 A1, titled "Multimedia Content Exchange Architecture and Services," published on August 2, 2007, and having a filing date of January 12, 2007 ("**Kenrick**").

22. U.S. Patent Application Publication No. 2007/0199076 A1, titled "System and Method for Remote Data Acquisition and Distribution," published on August 23, 2007, and having a filing date of January 16, 2007 ("**Rensin 076**").

23. U.S. Patent Application Publication No. 2008/0270541 A1, titled "Interactive Audio/Video Method on the Internet," published on October 30, 2008, and having a filing date of April 24, 2007 ("**Keener**").

24. U.S. Patent Application Publication No. 2002/0073205 A1, titled "Communication Service," published on June 13, 2002, and having a filing date of August 2, 2001 ("**Mostafa**").

25. U.S. Patent Application Publication No. 2003/0014488 A1, titled "System and Method for Enabling Multimedia Conferencing Services on a Real-Time Communications Platform," published on January 16, 2003, and having a filing date of June 11, 2002 ("**Dalal**").

26. U.S. Patent No. 7,885,340, titled "System and Method for Generating Multiple Synchronized Encoded Representations of Media Data," issued on February 8, 2011, and having a filing date of December 22, 2004 ("**Greenbaum**").

27. U.S. Patent No. 7,437,412, titled "Real-Time Communication of a Selected Type," issued on October 14, 2008, and having a filing date of January 19, 2007 ("**Ludwig**").

28. U.S. Patent Application Publication No. 2005/0015509 A1, titled "Method and System for Enhancing Live Stream Delivery Quality Using Prebursting," published on January 20, 2005, and having a filing date of April 10, 2003 ("**Sitaraman**").

29. U.S. Patent Application Publication No. 2002/0056123 A1, titled "Sharing a Streaming Video," published on May 9, 2002, and having a filing date of March 9, 2001 ("**Liwerant**").

30. U.S. Patent No. 6,675,386, titled "Apparatus for Video Access and Control Over Computer Network, Including Image Correction," issued on January 6, 2004, and having a filing date of September 4, 1997 ("**Hendricks**").

2. Systems, Products, and/or Knowledge

The Asserted Claims are invalid under 35 U.S.C. §§ 102 and/or 103 based on the prior art systems and/or products (hereinafter "systems") identified below and/or prior art products embodying, and alleged inventions or structures described in, and/or any knowledge disclosed by or referred to in, any of the prior art patent publications identified above in Section IV.B.1. Defendants reserve the right to amend and/or supplement this list as they learn of other prior art systems that would anticipate and/or render obvious the Asserted Claims.

Defendants' investigation is ongoing. Defendants have served third-party subpoenas, seeking documents and deposition testimony concerning the design, architecture, operation, public use, offers for sale, and sale of the below prior art products. As of the date of these contentions, discovery from those third parties is incomplete. Defendants reserve the right to serve additional third-party subpoenas on individuals and entities associated with any of the below prior art systems and/or additional prior art systems that Defendants are made aware of over the course of discovery. Accordingly, except where a cited reference is quoted or expressly relied upon, the contentions set forth in this chart reflect Defendants' present understanding of the prior art products based on presently available public materials and are made on information and belief. Defendants expressly

reserve the right to supplement, amend, and/or revise these Invalidity Contentions based on documents, things, source code, or testimony obtained in response to any third-party subpoena or through any other third-party or party discovery, consistent with the Local Rules, the Scheduling Order, and any applicable order of the Court. Specifically, Defendants expressly reserve all rights to rely on additional prior art if any asserted claims are determined not entitled to the priority dates presently asserted by Voxer including, without limitation, prior versions of the YouTube Live system that operated in substantially the same manner as the relevant accused functionality does today.

1. Bambuser
2. BlogTV
3. Justin.TV
4. Macromedia Breeze
5. Mogulus
6. Operator11
7. SpaceCruiser
8. Stickam
9. Streaming21
10. Ustream

V. INVALIDITY GROUNDS

A. Anticipation and Obviousness (35 U.S.C. § 102 and 35 U.S.C. § 103)

The prior art references identified in these invalidity contentions anticipate the Asserted Claims and/or render obvious the Asserted Claims alone, in light of the knowledge of a POSITA, and/or in combination with one or more other prior art references. Defendants rely on the prior

art patent publications and systems (hereinafter "references") identified in Sections IV.B.1-2 as their elected references in accordance with the Court's Scheduling Order (D.I. 36).

Defendants have charted each of these references against every Asserted Claim of each Asserted Patent, as reflected in the attached exhibits. Defendants may rely on any one of these references to establish that each of the Asserted Claims is anticipated and/or rendered obvious, and reserve the right to rely on any combination of any two or more of these references against any Asserted Claim. Defendants identify below and in Appendices A-E exemplary prior art combinations that anticipate and/or render obvious the Asserted Claims, without prejudice to them identifying and/or relying on other prior art and prior art combinations. Defendants reserve their right to amend and/or supplement these exemplary contentions in response to any new information introduced during fact discovery and in response to any amendment or supplementation to Voxer's infringement contentions.

Defendants also address below the motivation to combine based on discovery to date and reserve their right to amend and/or supplement that analysis as the litigation proceeds, including based on Defendants' ongoing investigation, any further claim construction proceedings, or any order of the Court. In *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398 (2007), the Supreme Court emphasized that inventions arising from ordinary innovation, ordinary skill, or common sense should not be patentable. *Id*. at 402-403, 417-418, 421-422. A patent claim may be obvious if the combination of elements was obvious to try or if there existed at the time of the invention a known problem for which there was an obvious solution encompassed by the patent's claims. When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a POSITA can implement a predictable variation, 35 U.S.C. § 103 likely bars its patentability. *Id*. at 417. The Court

emphasized that courts should "look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue." *Id*. at 418. "[A] court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ" to resolve the question of obviousness. *Id*.

Based on all of these considerations, as further detailed in the attached exhibits, a POSITA would have combined the teachings of the prior art references discussed and charted in those exhibits. The combinations of these references would have rendered obvious to a POSITA the subject matter of the Asserted Claims. The references identified in the attached exhibits are analogous prior art to the subject matter of the Asserted Claims and, for at least the reasons set forth below, are properly combinable. Because these prior art references exist within a single field of art, particularly one in which individuals in the field often shared their work and/or collaborated on work, it would have been obvious for a POSITA to look from one piece of prior art to another in order to find any missing functionality they desired to implement. Therefore, these references provide interrelated teachings and one of ordinary skill would look to the concepts in any of these references when seeking to solve the problems purportedly addressed by the Asserted Patents.

Numerous prior art references, including those identified in the attached exhibits, reflect common knowledge and the state of the prior art before the priority dates for the Asserted Patents. It would have therefore been obvious to a POSITA to combine any of a number of prior art references, including any combination of prior art references identified in the attached appendices, to meet the limitations of the Asserted Claims. Defendants' inclusion of exemplary combinations,

in view of the factors and exemplary motivations to combine identified herein, does not preclude Defendants from identifying other invalidating combinations and/or motivations as appropriate.

No showing of a specific motivation to combine prior art is required to combine the references disclosed above and in the attached charts, because each combination of art would have no unexpected results, and at most would simply represent a known alternative to one of ordinary skill in the art. *See KSR*, 550 U.S. at 415–16 (rejecting the Federal Circuit's "rigid" application of the teaching, suggestion, or motivation to combine test, instead espousing an "expansive and flexible" approach). Indeed, the Supreme Court held that a POSITA is "a person of ordinary creativity, not an automaton" and "in many cases a person of ordinary skill [in the art] will be able to fit the teachings of multiple patents together like pieces of a puzzle." *Id*. at 421. In view of *KSR*, the PTO issued a set of new Examination Guidelines. *See* Examination Guidelines for Determining Obviousness Under 35 U.S.C. § 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc*., 72 Fed. Reg. 57,526 (Oct. 10, 2007). Those Guidelines identified various rationales for finding a claim obvious, including:

a) Combining prior art elements according to known methods to yield predictable results;

b) Simple substitution of one known element for another to obtain predictable results;

c) Use of known techniques to improve similar devices (methods, or products) in the same way;

d) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;

e) "Obvious to try"—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;

f) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art;

g) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

Id. at 57, 529.

Clear and logical rationale to combine any of the references identified above with others exists from the prior art references themselves, as well as from the interrelated teachings of other prior art references, common knowledge, common sense, predictability, expectations, industry trends, design incentives or need, market demand or pressure, market forces, obviousness to try, the existence and nature of a known need or problem, and/or knowledge possessed by a POSITA. In addition, it would have been obvious to combine the prior art references identified above because there were only a finite number of predictable solutions and/or because known work in one field of endeavor prompts variations based on predictable design incentives and/or market forces either in the same field or a different one. In addition, the combinations of the prior art references identified above would have been obvious because the combinations represent the known potential options with a reasonable expectation of success. Moreover, the motivation to combine or modify prior art references is significantly stronger when, as here, the references seek to solve the same problem, come from the same field, and correspond well. *In re Inland Steel Co.*, 265 F.3d 1354, 1362 (Fed. Cir. 2001) (allowing two references to be combined as invalidating art under similar circumstances where the art "focus[ed] on the same problem . . . [,] c[a]me from the same field of art [and] . . . the identified problem found in the two references correspond[ed] well.").

Therefore, various reasons to combine the disclosed references exist. Nevertheless, in addition to the information contained herein, Defendants identify below additional motivations and reasons to combine the cited art.

Defendants reserve the right to rely on the knowledge of those skilled in the art, the testimony of expert witnesses, and/or other prior art, to show that it would have been obvious to include the allegedly missing limitation and to explain the motivation to combine the prior art elements.

As Voxer has yet to identify any alleged secondary considerations of non-obviousness, Defendants reserve the right to amend or supplement the secondary consideration analysis as the litigation proceeds, including based on any interrogatory responses, Defendants' ongoing investigation, and any further claim construction proceedings. Based on Defendants' investigation to date, Defendants are not aware of any of the following secondary considerations of non-obviousness with any nexus to the asserted claims of the Asserted Patents: commercial success, long-felt but unsolved need, failure of others, unexpected results, copying by competitors, industry praise and awards, expert skepticism, or licensing. Defendants reserve their right to respond to any alleged secondary considerations of non-obviousness raised by Voxer in this case.

1. Claim Charts

Charts specifically identifying where each element of each Asserted Claim is found in the prior art, either expressly or inherently, are included as Exhibits A-1 through E-40, as set forth below:

Exhibit - Patent - Reference
A-1 - 270 - Lee 393
A-2 - 270 - Keener
A-3 - 270 - Crandall
A-4 - 270 - Chiu 923
A-5 - 270 - Lee 560
A-6 - 270 - Brooks

Exhibit - Patent - Reference
A-7 - 270 - McNeill
A-8 - 270 - Chase
A-9 - 270 - Beavers
A-10 - 270 - Streaming21
A-11 - 270 - Macromedia Breeze
A-12 - 270 - JustinTV
A-13 - 270 - Ustream
A-14 - 270 - Stickam
A-15 - 270 - Operator11
A-16 - 270 - BlogTV
A-17 - 270 - Bambuser
A-18 - 270 - Kalaboukis
A-19 - 270 - Kenrick
A-20 - 270 - Branam
A-21 - 270 - Rensin 994
A-22 - 270 - SpaceCruiser
A-23 - 270 - Mogulus
A-24 - 270 - Mostafa
A-25 - 270 - Spencer
A-26 - 270 - Rensin 076
A-27 - 270 - Hundscheidt
A-28 - 270 - Liwerant
A-29 - 270 - Sitaraman
A-30 - 270 - Frailey
A-31 - 270 - Doty
A-32 - 270 - Carmel
A-33 - 270 - Hendricks
A-34 - 270 - Dalal
A-35 - 270 - Ludwig
A-36 - 270 - Greenbaum
A-37 - 270 - Ruetschi
A-38 - 270 - Raju
A-39 - 270 - Maeng
A-40 - 270 - Chiu 330
B-1 - 516 - Lee 393
B-2 - 516 - Keener
B-3 - 516 - Crandall
B-4 - 516 - Chiu 923

Exhibit - Patent - Reference
B-5 - 516 - Lee 560
B-6 - 516 - Brooks
B-7 - 516 - McNeill
B-8 - 516 - Chase
B-9 - 516 - Beavers
B-10 - 516 - Streaming21
B-11 - 516 - Macromedia Breeze
B-12 - 516 - JustinTV
B-13 - 516 - Ustream
B-14 - 516 - Stickam
B-15 - 516 - Operator11
B-16 - 516 - BlogTV
B-17 - 516 - Bambuser
B-18 - 516 - Kalaboukis
B-19 - 516 - Kenrick
B-20 - 516 - Branam
B-21 - 516 - Rensin 994
B-22 - 516 - SpaceCruiser
B-23 - 516 - Mogulus
B-24 - 516 - Mostafa
B-25 - 516 - Spencer
B-26 - 516 - Rensin 076
B-27 - 516 - Hundscheidt
B-28 - 516 - Liwerant
B-29 - 516 - Sitaraman
B-30 - 516 - Frailey
B-31 - 516 - Doty
B-32 - 516 - Carmel
B-33 - 516 - Hendricks
B-34 - 516 - Dalal
B-35 - 516 - Ludwig
B-36 - 516 - Greenbaum
B-37 - 516 - Ruetschi
B-38 - 516 - Raju
B-39 - 516 - Maeng
B-40 - 516 - Chiu 330
C-1 - 557 - Lee 393
C-2 - 557 - Keener

Exhibit - Patent - Reference
C-3 - 557 - Crandall
C-4 - 557 - Chiu 923
C-5 - 557 - Lee 560
C-6 - 557 - Brooks
C-7 - 557 - McNeill
C-8 - 557 - Chase
C-9 - 557 - Beavers
C-10 - 557 - Streaming21
C-11 - 557 - Macromedia Breeze
C-12 - 557 - JustinTV
C-13 - 557 - Ustream
C-14 - 557 - Stickam
C-15 - 557 - Operator11
C-16 - 557 - BlogTV
C-17 - 557 - Bambuser
C-18 - 557 - Kalaboukis
C-19 - 557 - Kenrick
C-20 - 557 - Branam
C-21 - 557 - Rensin 994
C-22 - 557 - SpaceCruiser
C-23 - 557 - Mogulus
C-24 - 557 - Mostafa
C-25 - 557 - Spencer
C-26 - 557 - Rensin 076
C-27 - 557 - Hundscheidt
C-28 - 557 - Liwerant
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C-31 - 557 - Doty
C-32 - 557 - Carmel
C-33 - 557 - Hendricks
C-34 - 557 - Dalal
C-35 - 557 - Ludwig
C-36 - 557 - Greenbaum
C-37 - 557 - Ruetschi
C-38 - 557 - Raju
C-39 - 557 - Maeng
C-40 - 557 - Chiu 330

Exhibit - Patent - Reference
D-1 - 883 - Lee 393
D-2 - 883 - Keener
D-3 - 883 - Crandall
D-4 - 883 - Chiu 923
D-5 - 883 - Lee 560
D-6 - 883 - Brooks
D-7 - 883 - McNeill
D-8 - 883 - Chase
D-9 - 883 - Beavers
D-10 - 883 - Streaming21
D-11 - 883 - Macromedia Breeze
D-12 - 883 - JustinTV
D-13 - 883 - Ustream
D-14 - 883 - Stickam
D-15 - 883 - Operator11
D-16 - 883 - BlogTV
D-17 - 883 - Bambuser
D-18 - 883 - Kalaboukis
D-19 - 883 - Kenrick
D-20 - 883 - Branam
D-21 - 883 - Rensin 994
D-22 - 883 - SpaceCruiser
D-23 - 883 - Mogulus
D-24 - 883 - Mostafa
D-25 - 883 - Spencer
D-26 - 883 - Rensin 076
D-27 - 883 - Hundscheidt
D-28 - 883 - Liwerant
D-29 - 883 - Sitaraman
D-30 - 883 - Frailey
D-31 - 883 - Doty
D-32 - 883 - Carmel
D-33 - 883 - Hendricks
D-34 - 883 - Dalal
D-35 - 883 - Ludwig
D-36 - 883 - Greenbaum
D-37 - 883 - Ruetschi
D-38 - 883 - Raju

Exhibit - Patent - Reference
D-39 - 883 - Maeng
D-40 - 883 - Chiu 330
E-1 - 929 - Lee 393
E-2 - 929 - Keener
E-3 - 929 - Crandall
E-4 - 929 - Chiu 923
E-5 - 929 - Lee 560
E-6 - 929 - Brooks
E-7 - 929 - McNeill
E-8 - 929 - Chase
E-9 - 929 - Beavers
E-10 - 929 - Streaming21
E-11 - 929 - Macromedia Breeze
E-12 - 929 - JustinTV
E-13 - 929 - Ustream
E-14 - 929 - Stickam
E-15 - 929 - Operator11
E-16 - 929 - BlogTV
E-17 - 929 - Bambuser
E-18 - 929 - Kalaboukis
E-19 - 929 - Kenrick
E-20 - 929 - Branam
E-21 - 929 - Rensin 994
E-22 - 929 - SpaceCruiser
E-23 - 929 - Mogulus
E-24 - 929 - Mostafa
E-25 - 929 - Spencer
E-26 - 929 - Rensin 076
E-27 - 929 - Hundscheidt
E-28 - 929 - Liwerant
E-29 - 929 - Sitaraman
E-30 - 929 - Frailey
E-31 - 929 - Doty
E-32 - 929 - Carmel
E-33 - 929 - Hendricks
E-34 - 929 - Dalal
E-35 - 929 - Ludwig
E-36 - 929 - Greenbaum

Exhibit - Patent - Reference
E-37 - 929 - Ruetschi
E-38 - 929 - Raju
E-39 - 929 - Maeng
E-40 - 929 - Chiu 330

In the claim charts included in this disclosure, Defendants identify specific portions of prior art references that disclose or render obvious the elements of the Asserted Claims. Although Defendants have identified at least one citation per element, each and every disclosure of the same element in a given reference is not necessarily identified. That Defendants did not identify each similar disclosure should not be construed as a concession by Defendants that such disclosure is not relevant. It should be recognized that a person of ordinary skill in the art would generally read a prior art reference as a whole and in the context of other publications, literature, and general knowledge in the field. To understand and interpret any specific statement or disclosure in a prior art reference, a person of ordinary skill in the art would rely upon other information including other publications and general scientific or engineering knowledge.

Where Defendants identify a particular figure in a prior art reference, the identification should be understood to encompass the caption and description of the figure as well as any text relating to the figure in the specification and prosecution history in addition to the figure itself. Similarly, where an identified portion of text refers to a figure or other material, the identification should be understood to include the referenced figure or other material as well.

Certain pieces of identified prior art disclose features of the Asserted Claims inherently. Defendants may rely on any evidence, including expert testimony, to establish the inherency of certain features of the prior art to invalidate the Asserted Claims.

2. All Asserted Patents

a. Exemplary Combinations and Motivation to Combine

As Defendants are currently unaware of the extent, if any, to which Plaintiffs will contend that limitations of the Asserted Claims are not anticipated by the art identified herein, Defendants reserve the right to identify other references and combinations that may render an allegedly missing limitation obvious. In addition, if and to the extent that Plaintiffs challenge the relevance of any of these references with respect to particular limitations of the Asserted Claims of the Asserted Patents, Defendants reserve their right to identify further motivation to combine particular references with additional particularity. Because each of the references identified above has been charted against every Asserted Claim, and because those references are drawn from the same field of art and address the same or closely related problems, Defendants reserve the right to rely on any combination of any two or more of those references against any Asserted Claim. The rationales and motivations to combine set forth in these contentions apply to each such combination, whether or not that particular combination is expressly enumerated herein or in the attached exhibits.

- To the extent any of the references or systems charted in any of Exhibits A-1 to E-40 do not disclose the "**identifier/information**" limitations ('270 Patent, claims 34[a], 43[a], 47, 55[a], 55[d], 76[a], 113[a]; '557 Patent, claims 69[pre]-[a], 78[a]-[b]; '516 Patent, claim 18[c]; '883 Patent, claims 1[b]-[c]; '929 Patent, claims 1[b]-[c]), it would have been obvious to combine any such reference with the disclosures cited in the claim charts associated with these limitations from one or more of Lee 393, Crandall, Kenrick, Branam, Mostafa, Chiu 923, Dalal, Greenbaum, Hendricks, Streaming21, or any of the references or systems cited herein. The POSITA would be motivated to combine these references because they address compatible networked multimedia systems and complementary identifier, user-identification, addressing, and recipient-information functions. A POSITA would have been motivated to try different multimedia communication techniques, including combining other techniques, to determine what was most reliable and/or most efficient. A POSITA would understand that including recipient or session identifiers and associated addressing information with multimedia communications was a widely used and well-understood technique for routing communications. The POSITA would have been further motivated to attach an "identifier" under Plaintiffs' apparent construction of that term (e.g., privacy settings) to a multimedia communication to ensure compliance with federal privacy laws governing video

and children's online privacy. *See* Video Privacy Protection Act, 18 U.S.C. § 2710 (restricting disclosure of personally identifiable information concerning consumers' video viewing activity); Children's Online Privacy Protection Rule, 64 Fed. Reg. 59,888 (Nov. 3, 1999) (codified at 16 C.F.R. pt. 312). Additionally, a POSITA would have had a reasonable expectation of success, as others in the art had already succeeded in disclosing these limitations. These combinations would have been obvious to try given that there were a finite number of identified, predictable solutions in the prior art, and there would have been a reasonable expectation of success to implement one prior-art solution using concepts from another prior-art reference in the same field. Moreover, these combinations would have been the result of applying known techniques to a known method—that was ready for improvement—to yield predictable results.

- To the extent any of the references or systems charted in any of Exhibits A-1 to E-40 do not disclose the "**ascertaining/identifying/determining a recipient/location/second participants in response to the identifier/information**" limitations ('270 Patent, claims 34[b], 43[b], 47, 55[d]-[e], 76[a], 113[b]; '557 Patent, claims 69[a], 78[b]; '516 Patent, claim 18[c]; '883 Patent, claim 1[c]; '929 Patent, claim 1[c]), it would have been obvious to combine any such reference with the disclosures cited in the claim charts associated with these limitations from one or more of Kenrick, Brooks, Branam, Crandall, Chase, Streaming21, Hendricks, Dalal, Chiu 923, Lee 393, or any of the references or systems cited herein. The POSITA would be motivated to combine these references because they address compatible networked multimedia systems and complementary recipient-identification, network-location, device-selection, and participant-routing functions. A POSITA would have been motivated to try different multimedia communication techniques, including combining other techniques, to determine what was most reliable and/or most efficient. A POSITA would understand that using identifiers, addresses, device information, or participant information to determine intended recipients and network locations was a widely used and well-understood technique for routing multimedia communications and supporting multiple recipients. Additionally, a POSITA would have had a reasonable expectation of success, as others in the art had already succeeded in disclosing these limitations. These combinations would have been obvious to try given that there were a finite number of identified, predictable solutions in the prior art, and there would have been a reasonable expectation of success to implement one prior-art solution using concepts from another prior-art reference in the same field. Moreover, these combinations would have been the result of applying known techniques to a known method—that was ready for improvement—to yield predictable results.

- To the extent any of the references or systems charted in any of Exhibits A-1 to E-40 do not disclose the "**without having to first establish an end-to-end connection**" limitations ('270 Patent, claims 34[f], 55[e], 59[b], 113[c]; '557 Patent, claims 1[e], 78[f]; '516 Patent, claim 1[d]; '883 Patent, claim 1[d]; '929 Patent, claim 1[e]), it would have been obvious to combine any such reference with

the disclosures cited in the claim charts associated with these limitations from one or more of Lee 393, Crandall, Brooks, Keener, Mostafa, Dalal, Hendricks, Sitaraman, Streaming21, Chiu 923, or any of the references or systems cited herein. The POSITA would be motivated to combine these references because they address compatible networked multimedia systems and complementary server-mediated receipt, buffering, routing, and live-delivery functions. A POSITA would have been motivated to try different multimedia communication techniques, including combining other techniques, to determine what was most reliable and/or most efficient. A POSITA would understand that using an intermediary server and buffering or forwarding multimedia without a pre-established direct connection was a widely used and well-understood technique for permitting delivery when recipient devices were unavailable, behind network boundaries, or not yet connected. Additionally, a POSITA would have had a reasonable expectation of success, as others in the art had already succeeded in disclosing these limitations. These combinations would have been obvious to try given that there were a finite number of identified, predictable solutions in the prior art, and there would have been a reasonable expectation of success to implement one prior-art solution using concepts from another prior-art reference in the same field. Moreover, these combinations would have been the result of applying known techniques to a known method—that was ready for improvement—to yield predictable results.

- To the extent any of the references or systems charted in any of Exhibits A-1 to E-40 do not disclose the "**receiving video regardless of availability/the location(s) for the second device(s) being ascertained" / "storing the video communication/video media**" limitations ('270 Patent, claims 34[c]-[d], 47, 55[c]-[d], 59[c]-[d], 113[c]-[d]; '557 Patent, claims 15[a]-[b], 18[b]; '516 Patent, claim 1[e]; '883 Patent, claim 1[c]; '929 Patent, claims 12[a]-[b]), it would have been obvious to combine any such reference with the disclosures cited in the claim charts associated with these limitations from one or more of Lee 393, Crandall, Brooks, Kenrick, Mostafa, Streaming21, Sitaraman, Liwerant, Hendricks, Chiu 923, or any of the references or systems cited herein. The POSITA would be motivated to combine these references because they address compatible networked multimedia systems and complementary server, buffer, cache, and store-and-forward functions. A POSITA would have been motivated to try different multimedia communication techniques, including combining other techniques, to determine what was most reliable and/or most efficient. A POSITA would understand that storing video in infrastructure-accessible storage during receipt or before delivery was a widely used and well-understood technique for supporting store-and-forward delivery, later viewing, and delivery when recipient devices were unavailable. Additionally, a POSITA would have had a reasonable expectation of success, as others in the art had already succeeded in disclosing these limitations. These combinations would have been obvious to try given that there were a finite number of identified, predictable solutions in the prior art, and there would have been a reasonable expectation of success to implement one prior-art solution using concepts from another prior-art reference in the same field. Moreover, these combinations would have been the result of applying known

techniques to a known method—that was ready for improvement—to yield predictable results.

- To the extent any of the references or systems charted in any of Exhibits A-1 to E-40 do not disclose the "**exchanging messages in response**" / "**multi-media messaging**" / "**conversation threading**" limitations ('270 Patent, claims 77[a]-[b], 113[f]; '557 Patent, claims 70[a]-[b], 88[a]-[b]; '883 Patent, claims 1[b]-[c], 1[e], 4[b]; '929 Patent, claims 1[c], 1[f]-[i]), it would have been obvious to combine any such reference with the disclosures cited in the claim charts associated with these limitations from one or more of Crandall, Chase, Chiu 923, Chiu 330, McNeill, Maeng, Dalal, Ludwig, Ruetschi, Raju, or any of the references or systems cited herein. The POSITA would be motivated to combine these references because they address compatible networked multimedia systems and complementary responsive-messaging, multimedia-conversation, string-organization, and message-association functions. A POSITA would have been motivated to try different multimedia communication techniques, including combining other techniques, to determine what was most reliable and/or most efficient. A POSITA would understand that responsive text, audio, or video messages, message contribution, string or thread organization, and association of related messages were widely used and well-understood techniques for improving multimedia communication and preserving conversational context. Additionally, a POSITA would have had a reasonable expectation of success, as others in the art had already succeeded in disclosing these limitations. These combinations would have been obvious to try given that there were a finite number of identified, predictable solutions in the prior art, and there would have been a reasonable expectation of success to implement one prior-art solution using concepts from another prior-art reference in the same field. Moreover, these combinations would have been the result of applying known techniques to a known method—that was ready for improvement—to yield predictable results.

- To the extent any of the references or systems charted in any of Exhibits A-1 to E-40 do not disclose the "**time-shifted rendering**" limitations ('270 Patent, claims 51[b], 66[b]; '557 Patent, claims 15[b], 18[b]; '883 Patent, claim 4[a]; '929 Patent, claims 1[i], 12[b]), it would have been obvious to combine any such reference with the disclosures cited in the claim charts associated with these limitations from one or more of Lee 393, Brooks, Streaming21, Sitaraman, Rensin 076, Mostafa, Kenrick, McNeill, Hendricks, Chiu 923, or any of the references or systems cited herein. The POSITA would be motivated to combine these references because they address compatible networked multimedia systems and complementary storage, buffering, asynchronous-delivery, and playback functions. A POSITA would have been motivated to try different multimedia communication techniques, including combining other techniques, to determine what was most reliable and/or most efficient. A POSITA would understand that time-shifted or asynchronous rendering of stored video was a widely used and well-understood technique for accommodating delayed viewing, recipient availability, and different viewing times. Additionally, a POSITA would have had a reasonable expectation of success,

as others in the art had already succeeded in disclosing these limitations. These combinations would have been obvious to try given that there were a finite number of identified, predictable solutions in the prior art, and there would have been a reasonable expectation of success to implement one prior-art solution using concepts from another prior-art reference in the same field. Moreover, these combinations would have been the result of applying known techniques to a known method—that was ready for improvement—to yield predictable results.

- To the extent any of the references or systems charted in any of Exhibits A-1 to E-40 do not disclose the "**codec ascertainment**" / "**transcoding**" limitations ('270 Patent, claim 48; '557 Patent, claims 14[a]-[d]), it would have been obvious to combine any such reference with the disclosures cited in the claim charts associated with these limitations from one or more of Frailey, Chase, Hendricks, Greenbaum, Brooks, Chiu 923, Dalal, Kenrick, Lee 393, Carmel, Kalaboukis, Doty, or any of the references or systems cited herein. The POSITA would be motivated to combine these references because they address compatible networked multimedia systems and complementary codec, format-conversion, and device-adaptation functions. A POSITA would have been motivated to try different multimedia communication techniques, including combining other techniques, to determine what was most reliable and/or most efficient. A POSITA would understand that ascertaining the codec used by the sending device, ascertaining the codec to be used by the recipient device, and transcoding video after receipt by the video message service infrastructure and before transmission to a recipient, including transcoding between sender and recipient codecs, was a widely used and well-understood technique for accommodating different devices, formats, and network conditions. Additionally, a POSITA would have had a reasonable expectation of success, as others in the art had already succeeded in disclosing these limitations. These combinations would have been obvious to try given that there were a finite number of identified, predictable solutions in the prior art, and there would have been a reasonable expectation of success to implement one prior-art solution using concepts from another prior-art reference in the same field. Moreover, these combinations would have been the result of applying known techniques to a known method—that was ready for improvement—to yield predictable results.

- To the extent any of the references or systems charted in any of Exhibits A-1 to E-40 do not disclose the "**plurality of servers**" limitations ('270 Patent, claim 47; '557 Patent, claim 9; '516 Patent, claim 18[a]; '929 Patent, claim 1[a]), it would have been obvious to combine any such reference with the disclosures cited in the claim charts associated with these limitations from one or more of Hendricks, Sitaraman, Liwerant, Streaming21, Chiu 923, Chiu 330, Crandall, Spencer, SpaceCruiser, Lee 393, or any of the references or systems cited herein. The POSITA would be motivated to combine these references because they address compatible networked multimedia systems and complementary distributed-server, load-balancing, storage, routing, and delivery functions. A POSITA would have been motivated to try different multimedia communication techniques, including combining other techniques, to determine what was most reliable and/or most

efficient. A POSITA would understand that using a plurality of cooperating servers for receipt, storage, routing, formatting, and delivery was a widely used and well-understood technique for improving reliability, scalability, and load balancing in multimedia communication systems. Additionally, a POSITA would have had a reasonable expectation of success, as others in the art had already succeeded in disclosing these limitations. These combinations would have been obvious to try given that there were a finite number of identified, predictable solutions in the prior art, and there would have been a reasonable expectation of success to implement one prior-art solution using concepts from another prior-art reference in the same field. Moreover, these combinations would have been the result of applying known techniques to a known method—that was ready for improvement—to yield predictable results.

- To the extent any of the references or systems charted in any of Exhibits A-1 to E-40 do not disclose the "**providing an application**" limitations ('270 Patent, claim 66[pre]; '557 Patent, claims 17 and 18[pre]), it would have been obvious to combine any such reference with the disclosures cited in the claim charts associated with these limitations from one or more of Hendricks, Ustream, Greenbaum, Ludwig, Frailey, Keener, Crandall, Chase, Lee, Chiu 923, or any of the references or systems cited herein. The POSITA would be motivated to combine these references because they address compatible networked multimedia systems and complementary sender-side, recipient-side, playback, and interactive-communication application functions. A POSITA would have been motivated to try different multimedia communication techniques, including combining other techniques, to determine what was most reliable and/or most efficient. A POSITA would understand that providing an application for execution on a sending or recipient device was a widely used and well-understood technique for enabling capture, transmission, decoding, playback, and interaction with multimedia communications. Additionally, a POSITA would have had a reasonable expectation of success, as others in the art had already succeeded in disclosing these limitations. These combinations would have been obvious to try given that there were a finite number of identified, predictable solutions in the prior art, and there would have been a reasonable expectation of success to implement one prior-art solution using concepts from another prior-art reference in the same field. Moreover, these combinations would have been the result of applying known techniques to a known method—that was ready for improvement—to yield predictable results.

- To the extent any of the references or systems charted in any of Exhibits A-1 to E-40 do not disclose the "**notification**" limitations ('270 Patent, claims 42, 76[b]; '557 Patent, claims 21, 69[b], 79; '883 Patent, claim 1[c]; '929 Patent, claims 1[b]-[c]), it would have been obvious to combine any such reference with the disclosures cited in the claim charts associated with these limitations from one or more of Lee 393, Branam, Hendricks, Ustream, Crandall, Streaming21, Mostafa, Chiu 923, Chiu 330, SpaceCruiser, or any of the references or systems cited herein. The POSITA would be motivated to combine these references because they address compatible networked multimedia systems and complementary recipient-alert,

availability, and delivery-notification functions. A POSITA would have been motivated to try different multimedia communication techniques, including combining other techniques, to determine what was most reliable and/or most efficient. A POSITA would understand that generating or providing a notification indicative of video availability was a widely used and well-understood technique for alerting recipients, coordinating delivery, and supporting store-and-forward multimedia communications. Additionally, a POSITA would have had a reasonable expectation of success, as others in the art had already succeeded in disclosing these limitations. These combinations would have been obvious to try given that there were a finite number of identified, predictable solutions in the prior art, and there would have been a reasonable expectation of success to implement one prior-art solution using concepts from another prior-art reference in the same field. Moreover, these combinations would have been the result of applying known techniques to a known method—that was ready for improvement—to yield predictable results.

- To the extent any of the references or systems charted in any of Exhibits A-1 to E-40 do not disclose the "**portions**" / "**segmentation**" limitations ('270 Patent, claims 34[e], 51[a]-[b], 55[e], 113[e]; '557 Patent, claims 1[d], 18[a], 78[e]; '516 Patent, claims 1[e], 18[d]; '883 Patent, claims 1[c]-[d], 16[a]; '929 Patent, claim 1[d]), it would have been obvious to combine any such reference with the disclosures cited in the claim charts associated with these limitations from one or more of Spencer, Crandall, Chase, Brooks, Sitaraman, Liwerant, Mostafa, Streaming21, Rensin 076, Carmel, or any of the references or systems cited herein. The POSITA would be motivated to combine these references because they address compatible networked multimedia systems and complementary segmentation, packetization, slicing, buffering, and partial-delivery functions. A POSITA would have been motivated to try different multimedia communication techniques, including combining other techniques, to determine what was most reliable and/or most efficient. A POSITA would understand that dividing a video stream into segments, frames, slices, portions, or packets and delivering at least a portion for rendering was a widely used and well-understood technique for improving the reliability and efficiency of multimedia communications. Additionally, a POSITA would have had a reasonable expectation of success, as others in the art had already succeeded in disclosing these limitations. These combinations would have been obvious to try given that there were a finite number of identified, predictable solutions in the prior art, and there would have been a reasonable expectation of success to implement one prior-art solution using concepts from another prior-art reference in the same field. Moreover, these combinations would have been the result of applying known techniques to a known method—that was ready for improvement—to yield predictable results.

- To the extent any of the references or systems charted in any of Exhibits A-1 to E-40 do not disclose the "**two or more degraded versions**" / "**adaptive bit adjustment**" / "**ascertained bandwidth**" limitations ('557 Patent, claims 1[b]-[d], 78[c]-[f]; '883 Patent, claims 16[b]-[c]), it would have been obvious to combine

any such reference with the disclosures cited in the claim charts associated with these limitations from one or more of Greenbaum, Hendricks, Frailey, Brooks, Chiu 923, Carmel, Dalal, Macromedia Breeze, Lee 393, Streaming21, or any of the references or systems cited herein. The POSITA would be motivated to combine these references because they address compatible networked multimedia systems and complementary encoding, quality-adaptation, bandwidth-assessment, and recipient-selection functions. A POSITA would have been motivated to try different multimedia communication techniques, including combining other techniques, to determine what was most reliable and/or most efficient. A POSITA would understand that generating two or more versions with different amounts of quality degradation, selecting a version based on ascertained bandwidth, adaptively adjusting the number of bits carried in segment payloads based on ascertained bandwidth, and transmitting or streaming the selected or adjusted version was a widely used and well-understood technique for adapting multimedia delivery to device and network capacities and preserving reliable playback. Additionally, a POSITA would have had a reasonable expectation of success, as others in the art had already succeeded in disclosing these limitations. These combinations would have been obvious to try given that there were a finite number of identified, predictable solutions in the prior art, and there would have been a reasonable expectation of success to implement one prior-art solution using concepts from another prior-art reference in the same field. Moreover, these combinations would have been the result of applying known techniques to a known method—that was ready for improvement—to yield predictable results.

- To the extent any of the references or systems charted in any of Exhibits A-1 to E-40 do not disclose the "**first and second real-time streaming protocol**" limitations ('557 Patent, claim 8), it would have been obvious to combine any such reference with the disclosures cited in the claim charts associated with these limitations from one or more of Hendricks, Beavers, Dalal, Spencer, Liwerant, Sitaraman, Carmel, Streaming21, Bambuser, Lee 393, or any of the references or systems cited herein. The POSITA would be motivated to combine these references because they address compatible networked multimedia systems and complementary protocol, codec, and path-interoperability functions. A POSITA would have been motivated to try different multimedia communication techniques, including combining other techniques, to determine what was most reliable and/or most efficient. A POSITA would understand that using compatible or different real-time streaming protocols on the sender-to-service and service-to-recipient paths was a widely used and well-understood technique for interoperating across networks, devices, and media servers. Additionally, a POSITA would have had a reasonable expectation of success, as others in the art had already succeeded in disclosing these limitations. These combinations would have been obvious to try given that there were a finite number of identified, predictable solutions in the prior art, and there would have been a reasonable expectation of success to implement one prior-art solution using concepts from another prior-art reference in the same field. Moreover, these combinations would have been the result of applying known techniques to a known method—that was ready for improvement—to yield predictable results.

- To the extent any of the references or systems charted in any of Exhibits A-1 to E-40 do not disclose the "**receiving/streaming video as it is created**" / "**real-time rendering during transmission**" limitations ('270 Patent, claims 55[b], 59[pre]-[a], 66[a], 76[c]; '557 Patent, claims 1[a], 69[c]; '516 Patent, claims 1[a]-[c]; '883 Patent, claim 1[c]-[e]; '929 Patent, claim 1[d]-[e]), it would have been obvious to combine any such reference with the disclosures cited in the claim charts associated with these limitations from one or more of Streaming21, Carmel, Greenbaum, Macromedia Breeze, Operator11, Bambuser, Kenrick, Kalaboukis, Rensin 994, Sitaraman, or any of the references or systems cited herein. The POSITA would be motivated to combine these references because they address compatible networked multimedia systems and complementary live-capture, real-time upload, low-latency forwarding, and concurrent-playback functions. A POSITA would have been motivated to try different multimedia communication techniques, including combining other techniques, to determine what was most reliable and/or most efficient. A POSITA would understand that receiving video media at a service infrastructure as the media is being created and delivering that media so that it can be rendered while the sending device continues to create and transmit it was a widely used and well-understood technique for providing live and near-live multimedia communication. Additionally, a POSITA would have had a reasonable expectation of success, as others in the art had already succeeded in disclosing these limitations. These combinations would have been obvious to try given that there were a finite number of identified, predictable solutions in the prior art, and there would have been a reasonable expectation of success to implement one prior-art solution using concepts from another prior-art reference in the same field. Moreover, these combinations would have been the result of applying known techniques to a known method—that was ready for improvement—to yield predictable results.

- To the extent any of the references or systems charted in any of Exhibits A-1 to E-40 do not disclose the "**broadcast**" limitations ('270 Patent, claims 71, 124), it would have been obvious to combine any such reference with the disclosures cited in the claim charts associated with these limitations from one or more of Ustream, BlogTV, Operator11, Stickam, Streaming21, Keener, Lee, Kalaboukis, Macromedia Breeze, Beavers, or any of the references or systems cited herein. The POSITA would be motivated to combine these references because they address compatible networked multimedia systems and complementary broadcast, multicast, unicast-replication, and one-to-many distribution functions. A POSITA would have been motivated to try different multimedia communication techniques, including combining other techniques, to determine what was most reliable and/or most efficient. A POSITA would understand that broadcasting or multicasting a live video communication over a network to multiple concurrent viewers was a widely used and well-understood technique for distributing multimedia to large, dispersed, or open audiences. Additionally, a POSITA would have had a reasonable expectation of success, as others in the art had already succeeded in disclosing these limitations. These combinations would have been obvious to try given that there

were a finite number of identified, predictable solutions in the prior art, and there would have been a reasonable expectation of success to implement one prior-art solution using concepts from another prior-art reference in the same field. Moreover, these combinations would have been the result of applying known techniques to a known method—that was ready for improvement—to yield predictable results.

- To the extent any of the references or systems charted in any of Exhibits A-1 to E-40 do not disclose the "**video message/communication [service] infrastructure**" / "**communication infrastructure**" limitations ('270 Patent, Claims 55[pre], 55[c]; '557 Patent, claims 1[pre], 78[pre]; '516 Patent, claims 1[pre], 18[a]; '883 Patent, claim 1[a]; '929 Patent, claim 1[a]), it would have been obvious to combine any such reference with the disclosures cited in the claim charts associated with these limitations from one or more of Hendricks, Sitaraman, Liwerant, Streaming21, Macromedia Breeze, Lee, Crandall, Chiu 923, Rensin 076, Lee 393, or any of the references or systems cited herein. The POSITA would be motivated to combine these references because they address compatible networked multimedia systems and complementary network-infrastructure, service-platform, session-management, and server-mediated delivery functions. A POSITA would have been motivated to try different multimedia communication techniques, including combining other techniques, to determine what was most reliable and/or most efficient. A POSITA would understand that maintaining network-based communication infrastructure to receive, route, store, and deliver multimedia communications among participants was a widely used and well-understood technique for operating networked multimedia messaging and conferencing services. Additionally, a POSITA would have had a reasonable expectation of success, as others in the art had already succeeded in disclosing these limitations. These combinations would have been obvious to try given that there were a finite number of identified, predictable solutions in the prior art, and there would have been a reasonable expectation of success to implement one prior-art solution using concepts from another prior-art reference in the same field. Moreover, these combinations would have been the result of applying known techniques to a known method—that was ready for improvement—to yield predictable results.

b. Secondary Considerations

Voxer has not yet identified any secondary considerations of non-obviousness for any of the Asserted Patents. Based on Defendants' investigation to date, Defendants are not aware of any of the following secondary considerations of non-obviousness with any nexus to the asserted claims of the Asserted Patents: commercial success, long-felt but unsolved need, failure of others, unexpected results, copying by competitors, industry praise and awards, expert skepticism, or

licensing. Defendants reserve their right to amend these contentions in response to any alleged secondary considerations of non-obviousness raised by Voxer in this case.

3. ’270 Patent

Defendants allege that each of the Asserted Claims of the ’270 patent is anticipated and/or rendered obvious by each of the prior art references and systems identified in Sections IV.B.1-2. Defendants have included corresponding claims charts as Exhibits A-1 to A-40 hereto. In addition to the exemplary combinations and motivations to combine set forth in Section V.A.2.a, Defendants have further included in Appendix A exemplary combinations and motivations to combine the references charted in Exhibits A-1 to A-40. These identified combinations and motivations to combine are exemplary only. Because each of the references and systems identified herein has been charted against every Asserted Claim, and because those references and systems are drawn from the same field of art and address the same or closely related problems, Defendants reserve the right to rely on any combination of any two or more of those references against any Asserted Claim.

4. ’516 Patent

Defendants allege that each of the Asserted Claims of the ’516 patent is anticipated and/or rendered obvious by each of the prior art references and systems identified in Sections IV.B.1-2. Defendants have included corresponding claims charts as Exhibits B-1 to B-40 hereto. In addition to the exemplary combinations and motivations to combine set forth in Section V.A.2.a, Defendants have further included in Appendix B exemplary combinations and motivations to combine the references charted in Exhibits B-1 to B-40. These identified combinations and motivations to combine are exemplary only. Because each of the references and systems identified herein has been charted against every Asserted Claim, and because those references and systems are drawn from the same field of art and address the same or closely related problems, Defendants

reserve the right to rely on any combination of any two or more of those references against any Asserted Claim.

5. ’557 Patent

Defendants allege that each of the Asserted Claims of the ’557 patent is anticipated and/or rendered obvious by each of the prior art references and systems identified in Sections IV.B.1-2. Defendants have included corresponding claims charts as Exhibits C-1 to C-40 hereto. In addition to the exemplary combinations and motivations to combine set forth in Section V.A.2.a, Defendants have further included in Appendix C exemplary combinations and motivations to combine the references charted in Exhibits C-1 to C-40. These identified combinations and motivations to combine are exemplary only. Because each of the references and systems identified herein has been charted against every Asserted Claim, and because those references and systems are drawn from the same field of art and address the same or closely related problems, Defendants reserve the right to rely on any combination of any two or more of those references against any Asserted Claim.

6. ’883 Patent

Defendants allege that each of the Asserted Claims of the ’883 patent is anticipated and/or rendered obvious by each of the prior art references and systems identified in Sections IV.B.1-2. Defendants have included corresponding claims charts as Exhibits D-1 to D-40 hereto. In addition to the exemplary combinations and motivations to combine set forth in Section V.A.2.a, Defendants have further included in Appendix D exemplary combinations and motivations to combine the references charted in Exhibits D-1 to D-40. These identified combinations and motivations to combine are exemplary only. Because each of the references and systems identified herein has been charted against every Asserted Claim, and because those references and systems are drawn from the same field of art and address the same or closely related problems, Defendants

reserve the right to rely on any combination of any two or more of those references against any Asserted Claim.

7. '929 Patent

Defendants allege that each of the Asserted Claims of the '929 patent is anticipated and/or rendered obvious by each of the prior art references and systems identified in Sections IV.B.1-2. Defendants have included corresponding claims charts as Exhibits E-1 to E-40 hereto. In addition to the exemplary combinations and motivations to combine set forth in Section V.A.2.a, Defendants have further included in Appendix E exemplary combinations and motivations to combine the references charted in Exhibits E-1 to E-40. These identified combinations and motivations to combine are exemplary only. Because each of the references and systems identified herein has been charted against every Asserted Claim, and because those references and systems are drawn from the same field of art and address the same or closely related problems, Defendants reserve the right to rely on any combination of any two or more of those references against any Asserted Claim.

B. Unpatentable Subject Matter (35 U.S.C. § 101)

The Asserted Claims of the Asserted Patents are all invalid under 35 U.S.C. § 101 ("Section 101") on the grounds that they are directed to unpatentable abstract ideas and do not recite any inventive concepts. Defendants' invalidity contentions herein are not intended to and do not suggest that any claim of the Asserted Patents satisfies the requirements of Section 101. In these contentions, Defendants merely explain where the claim limitations are in the prior art, or how they are obvious, to the best of their ability and in the event that the claim terms are found to satisfy the requirements of Section 101. Defendants hereby incorporate by reference each of Defendants' Motion to Dismiss ("Defendants' 101 Motion"), D.I. 13; Defendants' Opening Brief in Support of

Defendants' 101 Motion, D.I. 14, 14-1; and Defendants' Reply in Support of Defendants' 101 Motion, D.I. 24, in their entirety.

Laws of nature, natural phenomena, and abstract ideas are not patentable. *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012). *Alice* established a two-step test for determining patent eligibility. *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 217-18 (2014). First, the court determines whether the claims are directed to a patent-ineligible abstract idea. *Id.* If so, the court determines whether the limitations, considered individually and as ordered combinations, recite an inventive concept that transforms the claims into something "significantly more" than the ineligible concept. *Id.* at 218 (internal quotations and citation omitted). As demonstrated below, the Asserted Claims are invalid under this two-step analysis.

1. '270 Patent

The asserted claims of the '270 Patent are directed to the patent-ineligible abstract idea of receiving, storing, and transmitting video in real time. The elements of the asserted claims of the '270 Patent do not, alone or in combination, disclose any inventive concept. Voxer has not identified any alleged inventive concept.

Representativeness. Claim 34 of the '270 Patent is representative of all other claims of the '270 Patent. *See Mobile Acuity Ltd. v. Blippar Ltd.*, 110 F.4th 1280, 1290 (Fed. Cir. 2024) ("Limiting the analysis of a § 101 challenge to representative claims is proper when the claims at issue are substantially similar and linked to the same ineligible concept.") (cleaned up); *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343, 1348 (Fed. Cir. 2014). Claim 34 of the '270 Patent recites a "video communication method" that receives an identifier associated with a video communication, uses the identifier to identify a recipient and ascertains a network location for a device associated with that recipient, receives and stores the video communication, and delivers that communication to the recipient's device so that the video

may be rendered while transmission is ongoing. Independent claims 55 and 113 are directed to analogous methods. The asserted dependent claims are all substantially similar to claim 34. For example, claims 42, 43, 48, 51, 59, 76, and 77 merely recite additional abstract information processing steps and conditions (e.g., transcoding, notification, multi-recipient distribution, delayed viewing or rendering of information, associating a video message with a conversation). Other dependent claims, such as claims 47 and 66, recite the addition of generic software or hardware components (e.g., servers). The remaining dependent claims 71 and 124 recite a trivial variation on claim 34—that the video communication is specifically a broadcast.

***Alice* Step One.** Representative claim 34 of the '270 Patent, and other claims of the '270 Patent, are directed to the patent-ineligible abstract idea of receiving, storing, and transmitting video in real time. The claims of the '270 Patent are substantially similar to claims rejected by the Federal Circuit in, for example, *Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC*, 874 F.3d 1329, 1337 (Fed. Cir. 2017). In *Two-Way Media*, the Federal Circuit held that a claimed "method for transmitting message packets over a communications network" requiring "converting a plurality of streams of audio and/or visual information into a plurality of streams of addressed digital packets," "routing such stream to one or more users," "controlling the routing of the stream of packets in response to selection signals received from the users," and "monitoring the reception of packets by the users" was invalid under 35 U.S.C. § 101 as directed to the "abstract idea of (1) sending information, (2) directing the sent information, (3) monitoring the receipt of the sent information, and (4) accumulating records about receipt of the sent information." *Id.* at 1334-35, 1337. The Federal Circuit explained that the claim merely "recites a method for routing information using result-based functional language." *Id.* at 1337. In other words, the claim "manipulates data but fails to do so in a non-abstract way." *Id.* at 1338. Representative claim 34

(and all asserted claims) of the ’270 Patent similarly recites a method for routing information using result-based functional language.

As discussed above, representative claim 34 is directed to the abstract idea of receiving, storing, and transmitting video in real time. Each of these functions, including the transmission of the video in real time, is an abstract information-processing step. For example, receiving and storing the video communication are conventional information-management operations. Ascertaining a recipient’s location from an identifier is nothing more than using location information to determine where a video communication should be sent. And transmitting the video communication is conventional transmission of information to an identified destination.

The Federal Circuit has repeatedly held such information processing steps to be abstract. *See, e.g.*, *GoTV Streaming, LLC v. Netflix, Inc.*, 166 F.4th 1053, 1065 (Fed. Cir. 2026) (“The claim’s calling for collecting and combining information for presentation to the rendering device does not provide a focus on an advance in non-abstract ideas. As already noted, the ideas of collecting, storing, organizing, and displaying information are, without more, themselves abstract in character…”); *AI Visualize, Inc. v. Nuance Commc’ns, Inc.*, 97 F.4th 1371, 1378 (Fed. Cir. 2024) (“[S]teps of obtaining, manipulating, and displaying data, particularly when claimed at a high level of generality, are abstract concepts.”); *Smartflash LLC v. Apple Inc.*, 680 F. App’x 977, 982 (Fed. Cir. 2017) (“[M]ethods of organizing human activity” are not patent-eligible because they are abstract ideas.); *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1261 (Fed. Cir. 2016) (finding the “conveyance and manipulation of information using wireless communication and computer technology” to be abstract ideas); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) (finding claims to be directed to patent-ineligible abstract idea where they are directed to a “process of gathering and analyzing information of a

specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions"); *see also Adaptive Streaming Inc. v. Netflix, Inc.*, 836 F. App'x 900 (Fed. Cir. 2020); *Affinity Labs of Tex., LLC v. Amazon.com Inc.*, 838 F.3d 1266 (Fed. Cir. 2016); *In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607 (Fed. Cir. 2016); *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343 (Fed. Cir. 2014); *Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306 (Fed. Cir. 2019); *Chamberlain Grp., Inc. v. Techtronic Indus. Co.*, 935 F.3d 1341 (Fed. Cir. 2019); *Ericsson Inc. v. TCL Commc'n Tech. Holdings Ltd.*, 955 F.3d 1317 (Fed. Cir. 2020); *Free Stream Media Corp. v. Alphonso Inc.*, 996 F.3d 1355 (Fed. Cir. 2021); *Dropbox, Inc. v. Thru Inc.*, No. 15-cv-01741-EMC, 2016 WL 6696042 (N.D. Cal. Nov. 15, 2016); *VideoShare LLC v. Google, Inc.*, C.A. No. 13-990 (GMS), 2016 WL 4137524 (D. Del. Aug. 2, 2016), aff'd, 695 Fed. Appx. 577 (Fed. Cir. 2017).

Nothing in claim 34 specifies how the claimed recipient identification, location ascertainment, video delivery, or partial video rendering should be performed. The claim does not recite any algorithm, data structure, network architecture, or information transmission protocol. Nor does the claim identify any particular mechanism for storing or delivering the communication. Instead, it only claims the desired results (i.e., identifying a recipient, determining the recipient's network location, receiving and storing the video, sending it to the recipient without an end-to-end connection, and enabling the video communication to be rendered while transmission is ongoing). Rather than reciting any specific improvements to generic computer technology, claim 34 (and the asserted claims of the '270 Patent) merely use computers as tools to achieve the claimed functions. *See GoTV Streaming*, 166 F.4th at 1066 (finding claims directed to abstract idea where "there is no improvement of computer/network operations in their ordinary functions, just the use of ordinary functions as a tool for executing the abstract idea."); *Elec. Power*, 830 F.3d at 1354 ("the

focus of the claims is not on . . . an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools"); *SynKloud Techs., LLC v. HP Inc.*, 490 F. Supp. 3d 806, 819 (D. Del. 2020) ("[N]one of the alleged improvements 'enables a computer . . . to do things it could not do before.'") (quoting *Finjan Inc. v. Blue Coat Systems*, 879 F.3d 1299, 1305 (Fed. Cir. 2018)).

Finally, the different and/or additional limitations of the additional asserted claims, including the dependent claims, do not make them any less abstract. Rather, they are all minor variations of the same general abstract idea. See *WiTricity Corp. v. Momentum Dynamics Corp.*, 563 F. Supp. 3d 309, 325 (D. Del. 2021) (dependent claims directed to "variations on the same abstract idea of optimizing either efficiency or power level in a power transfer process" did not change abstract nature of independent claims).

***Alice* Step Two.** The limitations of representative claim 34, and the other claims of the '270 Patent considered individually or as ordered combinations, do not recite any inventive concept. As noted above, claim 34 (and the asserted claims) does not claim any improved computer or algorithm to execute any of the claimed functionality. For example, the claimed "communication device" and "network" do not include any inventive features. The specification broadly defines "device" to be any "physical device that runs the Client application" including "a general-purpose computer, a portable computing device, a programmable phone, a programmable radio, or any other programmable communication device." ('270 Patent at 7:54-59.) And the recited "network" evidently refers to any and all existing network structures. (*See, e.g.*, '270 Patent at Figs. 3, 6, 7.) Indeed, the specification emphasizes that the claimed invention "take advantage of current packet-based communication networks running over the existing telecommunications infrastructure." ('270 Patent at 23:32-34.) The limitations of the dependent claims, *e.g.*, the "video

service infrastructure" of claim 55, the "video communication infrastructure" of claim 59, or the "application" of claim 66, similarly fail to include any inventive concept. As noted above, the specification states that the claimed invention is intended to "run[] over the *existing* telecommunications infrastructure." ('270 Patent at 23:33-34 (emphasis added).) And the specification refers to generic "Client and Server Applications." ('270 Patent at 6:6-7.) The use of conventional, general-purpose computers, software, and network components is not an inventive concept. *See, e.g.*, *Affinity Labs of Texas, LLC v. DIRECTV, LLC,* 838 F.3d 1253, 1263 (Fed. Cir. 2016) (no inventive concept where the claim "simply recites that the abstract idea of remote delivery will be implemented using the conventional components and functions generic to cellular telephones"); *Alice Corp. Pty. v. CLS Bank Int'l*, 573 U.S. 208, 225–26 (2014) (no inventive concept because "the claims at issue amount to nothing significantly more than an instruction to apply [an] abstract idea … using some unspecified, generic computer") (internal quotations and citations omitted).

Even in combination, the limitations of claim 34 (and the asserted claims) of the '270 Patent fail to supply any inventive concept. As discussed, representative claim 34 recites the following steps: receive information identifying the intended recipient; use that information to determine where the recipient's device is located; receive and store the communication; deliver the communication to the recipient; and permit immediate or delayed consumption. The dependent claims add only conventional adjuncts, such as sending notifications, repeating the process for multiple recipients, performing the functions using multiple servers, transcoding the information, broadcasting the communication, and permitting recipients to exchange responsive messages. The combination of these claimed elements does not alter the operation of the claimed computers or network. Indeed, the combination reflects precisely the conceptual steps one would expect in

delivering a communication according to recipient-identifying information: identify the intended recipient, determine where to send the communication, receive and hold the communication as necessary, and send it to the recipient. The claims do not recite an unconventional arrangement of components analogous to a specific improvement in computer or network architecture. Instead, they merely use generic computer components to carry out conventional communication operations. *See Hawk Technology Systems, LLC v. Castle Retail, LLC*, 60 F.4th 1349, 1358 (Fed. Cir. 2023); *Two-way Media*, 874 F.3d at 1339.

2. '557 Patent

The asserted claims of the '557 Patent are directed to the patent-ineligible abstract idea of receiving, processing, and transmitting video in real time. The elements of the asserted claims of the '557 Patent do not, alone or in combination, disclose any inventive concept. Voxer has not identified any alleged inventive concept.

Representativeness. Claim 1 of the '557 Patent is representative of the other claims of the '557 Patent. *See Content Extraction*, 776 F.3d at 1348. Claim 1 of the '557 Patent recites a "method for operating a video message service infrastructure on a network" that receives a video media while it is being created, generates versions of the video with differing qualities, selects one of those versions based on available network bandwidth, and transmits that version of the video to a recipient for rendering without first establishing an end-to-end connection between the sending and receiving devices. Independent claim 78 is directed to an analogous method. The dependent claims are all substantially similar to claim 1. For example, claims 8, 9, 14, 15, 17, 18, 21, 69, 70, 79, and 88 merely recite additional abstract and/or conventional information processing steps and conditions (e.g., use of existing real-time streaming protocols, transcoding, video storage, notification, identification of multiple recipients).

***Alice* Step One.** Representative claim 1 of the '557 Patent, and other claims of the '557 Patent, are directed to the patent-ineligible abstract idea of receiving, processing, and transmitting video in real time. The claims of the '557 Patent mirror claims rejected by the Federal Circuit in *Adaptive Streaming Inc. v. Netflix, Inc.*, 836 F. App'x 900, 901–903 (Fed. Cir. 2020). In *Adaptive Streaming*, the Federal Circuit held that a claimed method directed to "a technique including a system for capturing audio and video information from a first source and displaying such video and audio information at a second source, where the format of the first source and the format of the second source are different from each other," *id.* at 901, was invalid under 35 U.S.C. § 101 as directed to the "abstract idea of collecting information and transcoding it into multiple formats," *id*. at 903. The Federal Circuit explained that the "focus of the claimed advance is the abstract idea of format conversion, from an incoming signal's format to a variety of formats suited to different destination devices." *Id.* The Federal Circuit determined the claims at issue to be abstract because "the ideas of encoding and decoding image data and of converting formats, including when data is received from one medium and sent along through another, are by themselves abstract ideas." *Id.* Representative claim 1 (and all asserted claims) of the '557 Patent similarly recites a method for video format conversion.

As discussed above, representative claim 1 is directed to the abstract idea of receiving, processing, and transmitting video in real time. Each of these functions is an abstract or conventional information-processing step. For example, receiving and transmitting the video communication are conventional information-management operations. Processing the video to generate different video versions based on quality and selecting one such version for transmission after "ascertain[ing] bandwidth" are mere video format conversion operations. The Federal Circuit has repeatedly held such information processing steps to be abstract. *See, e.g.*, *GoTV Streaming,*

LLC v. Netflix, Inc., 166 F.4th 1053, 1065 (Fed. Cir. 2026) ("The claim's calling for collecting and combining information for presentation to the rendering device does not provide a focus on an advance in non-abstract ideas. As already noted, the ideas of collecting, storing, organizing, and displaying information are, without more, themselves abstract in character…"); *AI Visualize, Inc. v. Nuance Commc'ns, Inc.*, 97 F.4th 1371, 1378 (Fed. Cir. 2024) ("[S]teps of obtaining, manipulating, and displaying data, particularly when claimed at a high level of generality, are abstract concepts."); *Smartflash LLC v. Apple Inc.*, 680 F. App'x 977, 982 (Fed. Cir. 2017) ("[M]ethods of organizing human activity" are not patent-eligible because they are abstract ideas.); *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1259 (Fed. Cir. 2016) (finding the "conveyance and manipulation of information using wireless communication and computer technology" to be abstract ideas); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (finding claims to be directed to patent-ineligible abstract idea where they are directed to a "process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions").

Nothing in claim 1 specifies how bandwidth is ascertained, how different degraded versions of the video are generated, how versions are selected for a particular bandwidth, or how transmission without an end-to-end connection is accomplished. The claim does not recite any algorithm, data structure, network architecture, or streaming protocol. Instead, it only claims the desired results (i.e., receiving a video message, generating different versions of the video, selecting a video version based on available bandwidth, delivering the video message). Rather than reciting any specific improvements to generic computer technology, claim 1 (and the asserted claims of the '557 Patent) merely use computers as tools to achieve these claimed functions. *See GoTV*

Streaming, 166 F.4th at 1066 (finding claims directed to abstract idea where "there is no improvement of computer/network operations in their ordinary functions, just the use of ordinary functions as a tool for executing the abstract idea."); *Elec. Power*, 830 F.3d at 1354 ("the focus of the claims is not on . . . an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools"); *SynKloud Techs., LLC v. HP Inc.*, 490 F. Supp. 3d 806, 819 (D. Del. 2020) ("[N]one of the alleged improvements 'enables a computer . . . to do things it could not do before.'") (quoting *Finjan Inc. v. Blue Coat Systems*, 879 F.3d 1299, 1305 (Fed. Cir. 2018)).

Finally, the different and/or additional limitations of the additional asserted claims, including the dependent claims, do not make them any less abstract. Rather, they are all minor variations of the same general abstract idea. *See WiTricity Corp.*, 563 F. Supp. 3d at 325 (dependent claims to "variations on the same abstract idea of optimizing either efficiency or power level in a power transfer process" did not change abstract nature of independent claims).

***Alice* Step Two.** The limitations of representative claim 1, and the other claims of the '557 Patent considered individually or as ordered combinations, do not recite any inventive concept. As noted above, claim 1 (and the asserted claims) does not claim any improved computer or algorithm to execute any of the claimed functionality. For example, the claimed "video message service infrastructure," "sending device," "recipient device," and "network" do not include any inventive features. The specification broadly defines "device" to be any "physical device that runs the Client application" including "a general-purpose computer, a portable computing device, a programmable phone, a programmable radio, or any other programmable communication device." ('557 Patent at 7:54-59.) And the recited "video message service infrastructure" and "network" evidently refer to any and all existing telecommunication infrastructure and network structures. (*See, e.g.*, '557 Patent at Figs. 3, 6, 7.) Indeed, the specification emphasizes that the claimed

invention "is intended to run or be layered over a variety of *existing* communication networks" and to "take advantage of *current* packet-based communication networks running over the *existing* telecommunications infrastructure." ('557 Patent at 23:32-34 (emphasis added), 24:45-46 (emphasis added).) The limitations of the dependent claims, *e.g.*, the "real-time streaming protocol" of claims 8 and 9, the "codec" of claim 15, or the "application" of claims 17 and 18, similarly fail to include any inventive concept. For example, the specification notes that the claimed invention is intended to have "[i]nteroperability with underlying telecommunication protocols." ('557 Patent at 24:41-42.) The specification emphasizes that "different Codec or Codecs, each having a different bit rate versus quality tradeoff, may be used" with the claimed invention. ('557 Patent at 32:26-28.) The specification refers to generic "Client and Server Applications." ('557 Patent at 6:6-7.) The use of conventional, general-purpose computers, software, and network components is not an inventive concept. *See, e.g.*, *Affinity Labs of Texas, LLC v. DIRECTV, LLC,* 838 F.3d 1253, 1263 (Fed. Cir. 2016) (no inventive concept where the claim "simply recites that the abstract idea of remote delivery will be implemented using the conventional components and functions generic to cellular telephones"); *Alice Corp. Pty. v. CLS Bank Int'l*, 573 U.S. 208, 225–26 (2014) (no inventive concept because "the claims at issue amount to nothing significantly more than an instruction to apply [an] abstract idea … using some unspecified, generic computer").

Even in combination, the limitations of claim 1 (and the asserted claims) of the '557 Patent fail to supply any inventive concept. As discussed, representative claim 1 recites the following steps: receive video media as it is created; generate two or more versions in which the quality of the video has been degraded by different amounts; select one of those degraded versions based on ascertained network bandwidth; and transmit the selected version to a recipient device for

rendering while the video is being created and transmitted. The dependent claims add only conventional adjuncts, such as using real-time streaming protocols, providing an application that enables transmission and receipt of video, notifying the recipient of the video message, and identifying multiple receiving users. The combination of these claimed elements does not alter the operation of the claimed computers or network. Indeed, the combination reflects precisely the conceptual steps one would expect in delivering a reformatted video communication according to available bandwidth: receive the video, generate degraded versions of the video, determine available bandwidth and select a corresponding version, and send it to the recipient. The claims do not recite an unconventional arrangement of components analogous to a specific improvement in computer or network architecture. Instead, they merely use generic computer components to carry out conventional communication operations. *See Hawk Technology Systems, LLC v. Castle Retail, LLC*, 60 F.4th 1349, 1358 (Fed. Cir. 2023); *Two-way Media*, 874 F.3d 1329, 1339 (Fed. Cir. 2017).

3. '516 Patent

Asserted claim 18 of the '516 Patent is directed to the patent-ineligible abstract idea of receiving and transmitting video in real time. The elements of claim 18 of the '516 Patent do not, alone or in combination, disclose any inventive concept. Voxer has not identified any alleged inventive concept.

***Alice* Step One.** As stated above, claim 18 of the '516 Patent is directed to the patent-ineligible abstract idea of receiving and transmitting video in real time. Claim 18 mirrors claims rejected by the Federal Circuit in *Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC*, 874 F.3d 1329, 1337 (Fed. Cir. 2017). In *Two-Way Media*, the Federal Circuit held that a claimed "method for transmitting message packets over a communications network" requiring "converting a plurality of streams of audio and/or visual information into a plurality of streams of addressed

digital packets," "routing such stream to one or more users," "controlling the routing of the stream of packets in response to selection signals received from the users," and "monitoring the reception of packets by the users" was invalid under 35 U.S.C. § 101 as directed to the "abstract idea of (1) sending information, (2) directing the sent information, (3) monitoring the receipt of the sent information, and (4) accumulating records about receipt of the sent information." *Id.* at 1337. The Federal Circuit explained that the claim merely "recites a method for routing information using result-based functional language." *Id.* In other words, the claim "manipulates data but fails to do so in a non-abstract way." *Id.* at 1338.

Claim 18 of the '516 Patent is similarly directed to receiving and transmitting video in real time. Each of these functions is an abstract information-processing step. For example, ascertaining a recipient's location from an identifier is nothing more than using location information to determine where a video communication should be sent. Receiving and sending the video communication are conventional information-management operations. And transmitting and rendering the video communication are conventional transmission of information to an identified destination. The Federal Circuit has repeatedly held such information processing steps to be abstract. *See, e.g.*, *GoTV Streaming, LLC v. Netflix, Inc.*, 166 F.4th 1053, 1065 (Fed. Cir. 2026) ("The claim's calling for collecting and combining information for presentation to the rendering device does not provide a focus on an advance in non-abstract ideas. As already noted, the ideas of collecting, storing, organizing, and displaying information are, without more, themselves abstract in character…"); *AI Visualize, Inc. v. Nuance Commc'ns, Inc.*, 97 F.4th 1371, 1378 (Fed. Cir. 2024) ("[S]teps of obtaining, manipulating, and displaying data, particularly when claimed at a high level of generality, are abstract concepts."); *Smartflash LLC v. Apple Inc.*, 680 F. App'x 977, 982 (Fed. Cir. 2017) ("[M]ethods of organizing human activity" are not patent-

eligible because they are abstract ideas.); *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1259 (Fed. Cir. 2016) (finding the "conveyance and manipulation of information using wireless communication and computer technology" to be abstract ideas); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (finding claims to be directed to patent-ineligible abstract idea where they are directed to a "process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions").

Nothing in claim 18 specifies how the claimed recipient identification, location ascertainment, video delivery, or partial video rendering should be performed. The claim does not recite any algorithm, data structure, network architecture, or information transmission protocol. Nor does the claim identify any particular mechanism for storing or delivering the communication. Instead, it only claims the desired results (i.e., identifying a recipient, determining the recipient's network location, receiving and storing the video, sending it to the recipient without an end-to-end connection, and enabling the video communication to be rendered while transmission is ongoing). Rather than reciting any specific improvements to generic computer technology, claim 18 merely uses computers as tools to achieve the claimed functions. *See GoTV Streaming*, 166 F.4th at 1066 (finding claims directed to abstract idea where "there is no improvement of computer/network operations in their ordinary functions, just the use of ordinary functions as a tool for executing the abstract idea."); *Elec. Power*, 830 F.3d at 1354 ("the focus of the claims is not on . . . an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools"); *SynKloud Techs., LLC v. HP Inc.*, 490 F. Supp. 3d 806, 819 (D. Del. 2020) ("[N]one of the alleged improvements 'enables a computer . . . to do things it could not do before.'") (quoting *Finjan Inc. v. Blue Coat Systems*, 879 F.3d 1299, 1305 (Fed. Cir. 2018)).

Finally, the different and/or additional limitations of the additional asserted claims, including the dependent claims, do not make them any less abstract. Rather, they are all minor variations of the same general abstract idea. *See WiTricity Corp.*, 563 F. Supp. 3d at 325 (dependent claims directed to "variations on the same abstract idea of optimizing either efficiency or power level in a power transfer process" did not change abstract nature of independent claims).

***Alice* Step Two.** The limitations of claim 18, considered individually or as ordered combinations, do not recite any inventive concept. As noted above, claim 18 does not claim any improved computer or algorithm to execute any of the claimed functionality. For example, the claimed "sending device," "recipient device," "network," "video message service infrastructure," and "servers" do not include any inventive features. The specification broadly defines "device" to be any "physical device that runs the Client application" including "a general-purpose computer, a portable computing device, a programmable phone, a programmable radio, or any other programmable communication device." ('516 Patent at 7:54-59.) The specification also defines "server" to be any "computer node on the communication network" that "provide routing, transcoding, security, encryption and authentication, and optimization of the transmission of data across the network." ('516 Patent at 8:1-7.) The recited "network," "server," and "video message service infrastructure" evidently refer to any and all existing network structures and telecommunication infrastructure. (*See, e.g.*, '516 Patent at Figs. 3, 5, 6, 7, 8.) Indeed, the specification emphasizes that the claimed invention "take advantage of *current* packet-based communication networks running over the *existing* telecommunications infrastructure." ('516 Patent at 23:32-34.) The use of conventional, general-purpose computers, software, and network components is not an inventive concept. *See, e.g.*, *Affinity Labs of Texas, LLC v. DIRECTV, LLC,* 838 F.3d 1253, 1263 (Fed. Cir. 2016) (no inventive concept where the claim "simply recites that

the abstract idea of remote delivery will be implemented using the conventional components and functions generic to cellular telephones"); *Alice Corp. Pty. v. CLS Bank Int'l*, 573 U.S. 208, 225–26 (2014) (no inventive concept because "the claims at issue amount to nothing significantly more than an instruction to apply [an] abstract idea … using some unspecified, generic computer").

Even in combination, the limitations of claim 18 of the '516 Patent fail to supply any inventive concept. As discussed, claim 18 recites the following steps: receive a video communication and information regarding recipients of the video message; determine the location of those recipients; transmit the video communication to the intended recipients; and permit real-time rendering. The combination of these claimed elements does not alter the operation of the claimed computers or network. Indeed, the combination reflects precisely the conceptual steps one would expect in delivering a video communication to recipients: identify the intended recipient, determine where to send the communication, and transmit the communication as appropriate. The claims do not recite an unconventional arrangement of components analogous to a specific improvement in computer or network architecture. Instead, they merely use generic computer components to carry out conventional communication operations. *See Hawk Technology Systems, LLC v. Castle Retail, LLC*, 60 F.4th 1349, 1358 (Fed. Cir. 2023); *Two-way Media*, 874 F.3d 1329, 1339 (Fed. Cir. 2017).

4. '883 Patent

The asserted claims of the '883 Patent are directed to the patent-ineligible abstract idea of receiving and transmitting video in real time and enabling messages generated in response to the video. The elements of the asserted claims of the '883 Patent do not, alone or in combination, disclose any inventive concept. Voxer has not identified any alleged inventive concept.

Representativeness. Claim 1 of the '883 Patent is representative of the other claims of the '883 Patent. *See Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*,

776 F.3d 1343, 1348 (Fed. Cir. 2014). Claim 1 of the '883 Patent recites a method that receives a multi-media video message while it is being created, determines recipients of the message, notifies the recipients, transmits the message to the recipients for rendering without first establishing an end-to-end connection between the sending and receiving devices, and enables the recipients to participate in a conversation in response to the message. The dependent claims 4 and 16 are substantially similar to claim 1 and merely recite additional abstract and/or conventional information processing steps and conditions (e.g., delayed viewing of the message, segmenting the video message).

***Alice* Step One.** Representative claim 1 of the '883 Patent, and other claims of the '883 Patent, are directed to the patent-ineligible abstract idea of receiving and transmitting video in real time and enabling messages generated in response to the video. The claims of the '883 Patent mirror claims rejected by the Federal Circuit in *Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC*, 874 F.3d 1329, 1337 (Fed. Cir. 2017). In *Two-Way Media*, the Federal Circuit held that a claimed "method for transmitting message packets over a communications network" requiring "converting a plurality of streams of audio and/or visual information into a plurality of streams of addressed digital packets," "routing such stream to one or more users," "controlling the routing of the stream of packets in response to selection signals received from the users," and "monitoring the reception of packets by the users" was invalid under 35 U.S.C. § 101 as directed to the "abstract idea of (1) sending information, (2) directing the sent information, (3) monitoring the receipt of the sent information, and (4) accumulating records about receipt of the sent information." *Id.* at 1337. The Federal Circuit explained that the claim merely "recites a method for routing information using result-based functional language." *Id.* In other words, the claim "manipulates

data but fails to do so in a non-abstract way." *Id.* at 1338. The asserted claims of the '883 Patent similarly recite a method for routing information using result-based functional language.

As discussed above, representative claim 1 (and the asserted claims) of the '883 Patent is directed to receiving and transmitting video in real time and enabling messages generated in response to the video. Each of these functions is an abstract information-processing step. For example, ascertaining a recipient's location from an identifier is nothing more than using location information to determine where a video communication should be sent. Receiving and forwarding a video communication and enabling recipients to participate in a conversation string are conventional information-management operations. And streaming and rendering the video communication and other multi-media messages is conventional transmission of information to an identified destination for review. The Federal Circuit has repeatedly held such information processing and transmission steps to be abstract. *See, e.g.*, *GoTV Streaming, LLC v. Netflix, Inc.*, 166 F.4th 1053, 1065 (Fed. Cir. 2026) ("The claim's calling for collecting and combining information for presentation to the rendering device does not provide a focus on an advance in non-abstract ideas. As already noted, the ideas of collecting, storing, organizing, and displaying information are, without more, themselves abstract in character…"); *AI Visualize, Inc. v. Nuance Commc'ns, Inc.*, 97 F.4th 1371, 1378 (Fed. Cir. 2024) ("[S]teps of obtaining, manipulating, and displaying data, particularly when claimed at a high level of generality, are abstract concepts."); *Smartflash LLC v. Apple Inc.*, 680 F. App'x 977, 982 (Fed. Cir. 2017) ("[M]ethods of organizing human activity" are not patent-eligible because they are abstract ideas.); *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1259 (Fed. Cir. 2016) (finding the "conveyance and manipulation of information using wireless communication and computer technology" to be abstract ideas); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016)

(finding claims to be directed to patent-ineligible abstract idea where they are directed to a "process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions"). Dependent claim 16 includes further limitations directed to segmenting the video message based on available network bandwidth, but that too is an abstract information processing step. *See, e.g.*, *Adaptive Streaming*, 836 F. App'x at 901–903.

Nothing in the asserted claims specifies how the claimed recipient identification, location ascertainment, video delivery, partial video rendering, video segmenting, or conversation set-up should be performed. The claims do not recite any algorithm, data structure, network architecture, or information transmission protocol. Nor do the claims identify any particular mechanism for streaming the communication, segmenting the video in response to available bandwidth, or setting up the response conversation strings. Instead, they only claim the desired results (i.e., identifying a recipient, determining the recipient's network location, streaming the video to the recipient without an end-to-end connection, enabling the video communication to be rendered while transmission is ongoing, enabling recipients to respond in a conversation, and segmenting video in response to available network bandwidth). Rather than reciting any specific improvements to generic computer technology, claim 1 (and the asserted claims of the '883 Patent) merely use computers as tools to achieve the claimed functions. *See GoTV Streaming*, 166 F.4th at 1066 (finding claims directed to abstract idea where "there is no improvement of computer/network operations in their ordinary functions, just the use of ordinary functions as a tool for executing the abstract idea."); *Elec. Power*, 830 F.3d at 1354 ("the focus of the claims is not on . . . an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools"); *SynKloud Techs., LLC v. HP Inc.*, 490 F. Supp. 3d 806, 819 (D. Del. 2020) ("[N]one of

the alleged improvements 'enables a computer . . . to do things it could not do before.'") (quoting *Finjan Inc. v. Blue Coat Systems*, 879 F.3d 1299, 1305 (Fed. Cir. 2018)).

Finally, the different and/or additional limitations of the additional asserted claims, including the dependent claims, do not make them any less abstract. Rather, they are all minor variations of the same general abstract idea. See *WiTricity Corp.*, 563 F. Supp. 3d at 325 (dependent claims directed to "variations on the same abstract idea of optimizing either efficiency or power level in a power transfer process" did not change abstract nature of independent claims).

***Alice* Step Two.** The limitations of representative claim 1, and the other claims of the '883 Patent, considered individually or as ordered combinations, do not recite any inventive concept. As noted above, claim 1 (and the asserted claims) does not claim any improved computer or algorithm to execute any of the claimed functionality. For example, the claimed "communication infrastructure," "network," "first client device," and "second client devices" do not include any inventive features. The specification broadly defines "device" to be any "physical device that runs the Client application" including "a general-purpose computer, a portable computing device, a programmable phone, a programmable radio, or any other programmable communication device." ('883 Patent at 7:54-59.) And the recited "communication infrastructure" and "network" evidently refer to any and all existing telecommunication infrastructure and network structures. (*See, e.g.*, '883 Patent at Figs. 3, 6, 7.) Indeed, the specification emphasizes that the claimed invention "is intended to run or be layered over a variety of *existing* communication networks" and to "take advantage of *current* packet-based communication networks running over the *existing* telecommunications infrastructure." ('883 Patent at 23:32-34 (emphasis added), 24:45-46 (emphasis added).) The use of conventional, general-purpose computers, software, and network components is not an inventive concept. *See, e.g.*, *Affinity Labs of Texas, LLC v. DIRECTV, LLC,*

838 F.3d 1253, 1263 (Fed. Cir. 2016) (no inventive concept where the claim "simply recites that the abstract idea of remote delivery will be implemented using the conventional components and functions generic to cellular telephones"); *Alice Corp. Pty. v. CLS Bank Int'l*, 573 U.S. 208, 225–26 (2014) (no inventive concept because "the claims at issue amount to nothing significantly more than an instruction to apply [an] abstract idea … using some unspecified, generic computer").

Even in combination, the limitations of claim 1 (and the asserted claims) of the '883 Patent fail to supply any inventive concept. As discussed, representative claim 1 recites the following steps: maintain network infrastructure; receive information concerning a video message; use that information to determine the intended participants; notify those participants; receive and store the video; transmit it to the intended recipients; permit real-time rendering; and allow recipients to respond. The dependent claims add only conventional adjuncts, such as concurrent rendering of the video communication and segmentation of the video communication into portions for network transmission. The combination of these claimed elements does not alter the operation of the claimed computers or network. Indeed, the combination reflects precisely the conceptual steps one would expect in delivering a video communication to recipients: identify the intended recipient, determine where to send the communication, receive and send the communication as necessary, and permit the recipient to respond. The claims do not recite an unconventional arrangement of components analogous to a specific improvement in computer or network architecture. Instead, they merely use generic computer components to carry out conventional communication operations. *See Hawk Technology Systems, LLC v. Castle Retail, LLC*, 60 F.4th 1349, 1358 (Fed. Cir. 2023); *Two-way Media*, 874 F.3d 1329, 1339 (Fed. Cir. 2017).

5. '929 Patent

Asserted claim 12 of the '929 Patent is directed to the patent-ineligible abstract idea of receiving, storing, and transmitting video in real-time or time-shifted mode and enabling messages

generated in response to the video. The elements of claim 12 of the '929 Patent do not, alone or in combination, disclose any inventive concept. Voxer has not identified any alleged inventive concept.

***Alice* Step One.** As stated above, claim 12 of the '929 Patent is directed to the patent-ineligible abstract idea of receiving, storing, and transmitting video in real-time or time-shifted mode and enabling messages generated in response to the video. Claim 12 mirrors claims rejected by the Federal Circuit in *Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC*, 874 F.3d 1329, 1337 (Fed. Cir. 2017). In *Two-Way Media*, the Federal Circuit held that a claimed "method for transmitting message packets over a communications network" requiring "converting a plurality of streams of audio and/or visual information into a plurality of streams of addressed digital packets," "routing such stream to one or more users," "controlling the routing of the stream of packets in response to selection signals received from the users," and "monitoring the reception of packets by the users" was invalid under 35 U.S.C. § 101 as directed to the "abstract idea of (1) sending information, (2) directing the sent information, (3) monitoring the receipt of the sent information, and (4) accumulating records about receipt of the sent information." *Id.* at 1337. The Federal Circuit explained that the claim merely "recites a method for routing information using result-based functional language." *Id.* In other words, the claim "manipulates data but fails to do so in a non-abstract way." *Id.* at 1338. Claim 12 of the '929 Patent similarly does no more than recite a method for routing information using result-based functional language.

Claim 12 of the '929 Patent is directed to receiving and storing a multi-media communication, determining where to send it based on information identifying the intended recipient, notifying the intended recipient, delivering it to the intended recipient, rendering it while transmission is ongoing, assembling additional messages into a message string, and allowing the

recipient and sender to participate in a multi-media messaging conversation. Each of these functions is an abstract information-processing step. For example, "ascertaining" a recipient's location from an "identifier" is nothing more than using location information to determine where a video communication should be sent. "Receiving," "storing," and "sending" a video communication and "assembling" messages into a conversation string are conventional information-management operations. And "transmitting" and "rendering" the video communication is conventional transmission of information to an identified destination for review. The Federal Circuit has repeatedly held such information processing steps to be abstract. *See, e.g.*, *GoTV Streaming, LLC v. Netflix, Inc.*, 166 F.4th 1053, 1065 (Fed. Cir. 2026) ("The claim's calling for collecting and combining information for presentation to the rendering device does not provide a focus on an advance in non-abstract ideas. As already noted, the ideas of collecting, storing, organizing, and displaying information are, without more, themselves abstract in character…"); *AI Visualize, Inc. v. Nuance Commc'ns, Inc.*, 97 F.4th 1371, 1378 (Fed. Cir. 2024) ("[S]teps of obtaining, manipulating, and displaying data, particularly when claimed at a high level of generality, are abstract concepts."); *Smartflash LLC v. Apple Inc.*, 680 F. App'x 977, 982 (Fed. Cir. 2017) ("[M]ethods of organizing human activity" are not patent-eligible because they are abstract ideas.); *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1259 (Fed. Cir. 2016) (finding the "conveyance and manipulation of information using wireless communication and computer technology" to be abstract ideas); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (finding claims to be directed to patent-ineligible abstract idea where they are directed to a "process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions").

Nothing in claim 12 specifies how the claimed recipient identification, location ascertainment, video delivery and storage, partial video rendering, or message assembling should be performed. The claim does not recite any algorithm, data structure, network architecture, or information transmission protocol. Nor does the claim identify any particular mechanism for storing, delivering, or assembling the communication. Instead, it only claims the desired results (i.e., identifying a recipient, determining the recipient's network location, receiving and storing the video, sending it to the recipient without an end-to-end connection, enabling the video communication to be rendered while transmission is ongoing, and assembling messages into a conversation thread). Rather than reciting any specific improvements to generic computer technology, claim 12 merely uses computers as tools to achieve the claimed functions. *See GoTV Streaming*, 166 F.4th at 1066 (finding claims directed to abstract idea where "there is no improvement of computer/network operations in their ordinary functions, just the use of ordinary functions as a tool for executing the abstract idea."); *Elec. Power*, 830 F.3d at 1354 ("the focus of the claims is not on . . . an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools"); *SynKloud Techs., LLC v. HP Inc.*, 490 F. Supp. 3d 806, 819 (D. Del. 2020) ("[N]one of the alleged improvements 'enables a computer . . . to do things it could not do before.'") (quoting *Finjan Inc. v. Blue Coat Systems*, 879 F.3d 1299, 1305 (Fed. Cir. 2018)).

Finally, the different and/or additional limitations of the additional asserted claims, including the dependent claims, do not make them any less abstract. Rather, they are all minor variations of the same general abstract idea. See *WiTricity Corp.*, 563 F. Supp. 3d at 325 (dependent claims directed to "variations on the same abstract idea of optimizing either efficiency or power level in a power transfer process" did not change abstract nature of independent claims).

***Alice* Step Two.** The limitations of claim 12, considered individually or as ordered combinations, do not recite any inventive concept. As noted above, claim 12 does not claim any improved computer or algorithm to execute any of the claimed functionality. For example, the claimed "first device," "second device," "communication infrastructure," and "storage locations" do not include any inventive features. The specification broadly defines "device" to be any "physical device that runs the Client application" including "a general-purpose computer, a portable computing device, a programmable phone, a programmable radio, or any other programmable communication device." ('929 Patent at 7:54-59.) The specification emphasizes that the recited "communication infrastructure" refers to existing telecommunications infrastructure. (*See, e.g.*, '929 Patent at 23:32-34 (the claimed invention "takes advantage of current packet-based communication networks running over the existing telecommunications infrastructure").) The specification also states that "[m]any possible implementations exist for the physical storage implementation…but not limited to: RAM, Flash memory, hard drives, optical media, or some combination thereof." ('929 Patent at 18:65-19:2.) The use of conventional, general-purpose computers, software, and network components is not an inventive concept. *See, e.g.*, *Affinity Labs of Texas, LLC v. DIRECTV, LLC,* 838 F.3d 1253, 1263 (Fed. Cir. 2016) (no inventive concept where the claim "simply recites that the abstract idea of remote delivery will be implemented using the conventional components and functions generic to cellular telephones"); *Alice Corp. Pty. v. CLS Bank Int'l*, 573 U.S. 208, 225–26 (2014) (no inventive concept because "the claims at issue amount to nothing significantly more than an instruction to apply [an] abstract idea … using some unspecified, generic computer").

Even in combination, the limitations of claim 12 of the '929 Patent fail to supply any inventive concept. As discussed, claim 12 recites the following steps: receive a video

communication and information regarding recipients of the video message; notify those recipients; store and stream the video communication to the intended recipients; permit real-time rendering; and allow recipients to respond. The combination of these claimed elements does not alter the operation of the claimed computers or network. Indeed, the combination reflects precisely the conceptual steps one would expect in delivering a video communication to recipients: identify the intended recipient, determine where to send the communication, receive, store, and send the communication as appropriate, and permit the recipient to respond. The claims do not recite an unconventional arrangement of components analogous to a specific improvement in computer or network architecture. Instead, they merely use generic computer components to carry out conventional communication operations. *See Hawk Technology Systems, LLC v. Castle Retail, LLC*, 60 F.4th 1349, 1358 (Fed. Cir. 2023); *Two-way Media*, 874 F.3d 1329, 1339 (Fed. Cir. 2017).

* * *

The above contentions and cited legal authority are exemplary only, and Defendants reserve their right to rely on other phrasings of the abstract ideas, claims, portions of the specification, and legal authority to support their assertion that the Asserted Claims of the Asserted Patents are unpatentable and invalid under 35 U.S.C. § 101.

C. Indefiniteness (35 U.S.C. § 112)

Defendants hereby identify grounds of invalidity based on indefiniteness under 35 U.S.C. § 112 ¶ 2.[3] These contentions shall not be construed as an admission that any claim construction advanced by Defendants in this case is in any way inconsistent, flawed, or erroneous. Nor should these contentions prevent Defendants from advancing claim construction and/or non-infringement

[3] Defendants reserve the right to supplement the grounds of invalidity based on indefiniteness asserted in these contentions, including in view of the USPTO's decisions in IPR Nos. 2026-00421, 2026-00422, and 2026-00423.

positions in lieu of, or in addition to, invalidity positions. Further, these contentions shall not be construed as an admission of or acquiescence to Voxer's purported construction of the claim language or of other positions advanced by Voxer during the course of this litigation. Defendants' invalidity contentions under 35 U.S.C. § 112 may depend, in part, on further claim construction from the Court, as well as Voxer's alleged scope of the Asserted Claims. Consequently, Defendants identify only the issues under 35 U.S.C. § 112 of which they are presently aware.

The claims of a patent must "particularly point[] out and distinctly claim[] the subject matter which the applicant regards as his invention." 35 U.S.C. § 112 ¶ 2. A claim is invalid as indefinite if it is not sufficiently precise to permit a potential competitor to determine whether or not it is infringing. *Morton Int'l, Inc. v. Cardinal Chem. Co.*, 5 F.3d 1464, 1470 (Fed. Cir. 1993). Specifically, "a patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). Furthermore, when a claim includes a term of degree, the patent "must provide 'some standard of measuring that degree' such that the claim language provide[s] 'enough certainty to one of skill in the art when read in context of the invention.'" *GE Lighting Sols., LLC v. Lights of Am., Inc.*, 663 Fed. Appx. 938, 940 (Fed. Cir. 2016) (citation omitted); *see also Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1370 (Fed. Cir. 2014), *aff'd*, 896 F.3d 1335 (Fed. Cir. 2018). For terms of degree, "the patent must provide that additional information in the form of 'objective boundaries.'" *GE Lighting,* 663 Fed. Appx. at 940. And the Federal Circuit's "case law is clear that the objective boundaries requirement applies to terms of degree." *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1364 (Fed. Cir. 2018).

Under the above-cited standard, a POSITA would not be able to determine the scope of the invention because of the indefiniteness of at least the following terms and therefore at least the following claims are invalid for indefiniteness.

1. '270 Patent

- **"identifier" ('270 Patent, all asserted claims)**

"Identifier" and claim limitations reciting an "identifier" are indefinite under § 112 because the term and those limitations, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention. As used in the claims, the term would not have a single, reasonably discernible meaning to a POSITA. Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products provide for an "identifier."

- **"video communication" / "portions of the video communication" ('270 Patent, all asserted claims)**

"Video communication" and "portions of the video communication," and claim limitations reciting "video communication" or "portions of the video communication," are indefinite under § 112 because the terms and those limitations, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention. As used in the claims, the terms would not have a single, reasonably discernible meaning to a POSITA. Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products provide for a "video communication" or "portions of the video communication."

- **"location[s] [on the network]" ('270 Patent, all asserted claims)**

"Location" and "location on the network," and claim limitations reciting "location" or "location on the network," are indefinite under § 112 because the terms and those limitations, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention. As used in the claims, the terms would not have a single, reasonably discernible meaning to a POSITA. Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products provide for ascertaining a "location on the network" for a recipient device.

- **"broadcast" ('270 Patent, claims 71 and 124)**

"Broadcast" and claim limitations reciting a "broadcast" are indefinite under § 112 because the term and those limitations, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention. As used in the claims, the term would not have a single, reasonably discernible meaning to a POSITA. Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products provide for a "broadcast."

- **"plurality of servers cooperating" ('270 Patent, claim 47)**

"Plurality of servers cooperating" and claim limitations reciting a "plurality of servers cooperating" are indefinite under § 112 because the term and those limitations, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention. As used in the claims, the phrase would not have a single, reasonably discernible meaning to a POSITA. Moreover, Plaintiffs'

Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products provide for a "plurality of servers cooperating."

- **"thread" ('270 Patent, claim 77)**

"Thread," and claim limitations reciting a "thread," are indefinite under § 112 because the term and the limitations in which it appears, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention. As used in the claims, the term would not have a single, reasonably discernible meaning to a POSITA. Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products provide for a "thread."

- **"arranging to provide an application" ('270 Patent, claim 66)**

"Arranging to provide an application" and claim limitations reciting "arranging to provide an application" are indefinite under § 112 because the term and those limitations, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention. As used in the claims, the phrase would not have a single, reasonably discernible meaning to a POSITA. Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products "arrang[e] to provide an application."

- **"exchange messages in response to the video message" ('270 Patent, claim 77)**

"Exchange messages in response to the video message" and claim limitations reciting "exchange messages in response to the video message" are indefinite under § 112 because the term and those limitations, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the

invention. As used in the claims, the phrase would not have a single, reasonably discernible meaning to a POSITA. Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products provide for "exchang[ing] messages in response to the video message."

- **"video media" ('270 Patent, claim 113)**

"Video media" and claim limitations reciting "video media" are indefinite under § 112 because the term and those limitations, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention. As used in the claims, the term would not have a single, reasonably discernible meaning to a POSITA. Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products provide for "video media."

2. '557 Patent

- **"identifier" ('557 Patent, claims 69-70, 78, 79, 88)**

"Identifier" and claim limitations reciting an "identifier" are indefinite under § 112 because the term and those limitations, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention. As used in the claims, the term would not have a single, reasonably discernible meaning to a POSITA. Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products provide for an "identifier."

- **"ascertained bandwidth" ('557 Patent, all asserted claims)**

"Ascertained bandwidth" and claim limitations reciting an "ascertained bandwidth" are indefinite under § 112 because the term and those limitations, read in light of the specification

delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention. As used in the claims, the term would not have a single, reasonably discernible meaning to a POSITA. Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products use "ascertained bandwidth" as required by the claims.

- **"providing an application for execution" ('557 Patent, claims 17, 18)**

"Providing an application for execution" and claim limitations reciting "providing an application for execution" are indefinite under § 112 because the term and those limitations, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention. As used in the claims, the phrase would not have a single, reasonably discernible meaning to a POSITA. Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products "provid[e] an application for execution."

- **"thread" ('557 Patent, claims 70, 88)**

"Thread," and claim limitations reciting "thread," are indefinite under § 112 because the term and those limitations, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention. As used in the claims, the term would not have a single, reasonably discernible meaning to a POSITA. Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products provide for a "thread."

- **"exchange second messages in response to the video message" ('557 Patent, claims 70, 88)**

"Exchange second messages in response to the video message" and claim limitations reciting "exchange second messages in response to the video message" are indefinite under § 112 because the term and those limitations, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention. As used in the claims, the phrase would not have a single, reasonably discernible meaning to a POSITA. Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products provide "exchang[ing] second messages in response to the video message."

D. Lack of Written Description (35. U.S.C. § 112)

The written description requirement requires that the patent's specification contain "a written description of the invention, and of the manner and process of making and using it." 35 U.S.C. § 112(a). A specification that "reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date" has adequate written description of the claimed invention. *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010). "[T]he test requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art." *Id.*

All asserted claims, including all the claim terms listed below, lack written description because Voxer did not possess the claimed video streaming technology. Voxer's own cited articles in the complaint show that Voxer was not in possession of the asserted claims as of 2007. D.I. 1 ¶ 35 n.6-9. Voxer cites an article published April 11, 2012 in TechCrunch titled "Walkie Talkie App Voxer Goes Big, IVP And Intel Lead $30 Million Round." Id. at n.6. In this article, Voxer is identified exclusively as a voice walkie-talkie product, rather than a video messaging or streaming

product. See https://techcrunch.com/2012/04/11/walkie-talkie-app-voxer-goes-big-ivp-and-intel-lead-30-million-round/ ("Voxer, a walkie talkie mobile app that lets you talk to friends across iPhones and Androids"). There is no mention of video in the article. *Id.* Instead, the article notes that "[t]he future of voice is what the big plan is really about." The article then states that Voxer leaders describe Voxer as a faster option to text messages because it "uses live voice." *Id.* Thus, as of 2012, let alone 2007, Voxer did not possess the claimed video technology.

The article then states that "[a]long its way in the early years, it has picked up a number of voice-related patents," i.e., the parent applications of the asserted patents. Voxer's own cited article describes the asserted patents as voice-related patents, not video-related patents. *Id.*

The article states that Voxer's technology was "[c]onceived of during [Tom Katis's] time serving in the Special Forces in Afghanistan, he originally thought the company would be for enterprises – large dispersed groups that needed a way to quickly share what was happening." Voxer's inspiration was improving tactical voice communication, not video communication.

Voxer's cited blog, published by Voxer itself, describes Voxer's app as a "walkie-talkie app," indicating that Voxer was in possession only of voice, not video, technology. *See* D.I. 1 ¶ 35 n.9 (citing https://www.voxer.com/blog/voxer-business-named-best-overall-app-in-the-first-annual-silicon-valley-business-app-awards.).

Voxer cites a 2017 article from Fractus Learning titled "Voxer: A Game-Changing App for Your PLN" which states that "Through Voxer, [users] can talk with others, text others, share videos, pictures, and links to articles with others." *See* D.I. 1 ¶ 35 n.6 (citing https://www.fractuslearning.com/voxer-game-changing-app-pln/.). By 2017, Voxer had finally achieved video sharing technology. But video sharing refers to sharing pre-recorded videos, not video streaming as required by the asserted claims. As of 2017, therefore, Voxer still did not

possess the claimed video streaming technology. And as of 2007, Voxer did not yet have possession of video sharing, let alone video streaming.

Voxer also cites an article published September 5, 2012 in the New York Times titled "Smartphone? Presto! 2-Way Radio" written by David Pogue, a leading consumer technology writer. D.I. 1 ¶ 35 n.7 (citing https://www.nytimes.com/2012/09/06/technology/personaltech/—zello-heytell-and-voxer-make-your-smartphone-a-walkie-talkie-david-pogue.html). The article notes that "[n]obody's settled on a good name for this communications category. But if we call them voice-texting apps, or walkie-talkie apps, you'll get the idea….an ingenious crossbreed of text messages and phone calls." *Id.* The entire article describes mostly voice communication, along with the ability to add photos and text alongside voice messages. *Id.* ("Voxer's best twist is that it includes, next to the Talk button, Photo and Text buttons. Your back-and-forths with someone, therefore, can freely intermix photos, spoken sentences and typed ones."). There is no mention of Voxer possessing video communication.

Another article published in TechCrunch on March 27, 2009, titled "RebelVox Makes Your Voicemail More Like Email," confirms that Voxer lacked video streaming technology as of the relevant priority date. https://techcrunch.com/2009/03/27/rebelvox-makes-your-voicemail-more-like-email/. At the time of the publication, Voxer was known as RebelVox. The article states that "RebelVox is a voice communications platform that aims to makes your voicemail function more like email….Your contact will be able to respond via another voicemail message, text message or email." *Id.* Again, all of the functionality is centered around voice coupled with the ability to respond with text, with no mention of video. As of 2009, Voxer was not in possession of any video streaming technology. At the time of the article, Voxer's "technology [was] not yet

available for consumers, but it will soon be shopped around to developers who may want to incorporate it in other apps."

In 2011, Voxer finally released its app. As described in another TechCrunch article published on November 23, 2011, 4 years after the priority date, Voxer's app was still described exclusively as a voice and text tool. https://techcrunch.com/2011/11/23/viralvoxer/. "You hold a talk button to record a quick message for the other party, although there's also an option to listen live to an incoming message that a friend is recording. You can also send text messages within the flow of correspondence." Id. *See also* https://techcrunch.com/2013/06/25/voxer-transforms-into-a-walkie-talkie-service-for-the-business-world/ (a 2013 TechCrunch article stating "Voxer service is an app for sending voice and text messages.").

In a 2013 interview about the Voxer app, published on AdMonsters, Tom Katis states that "Voxer is a next-gen push-to-talk system." https://www.admonsters.com/next-generation-communications-tech-qa-voxers-tom-katis/. Nothing in the interview suggests any video capabilities. Voxer's own founder characterizes Voxer's technology as a push-to-talk system, not a video streaming system, further demonstrating that Voxer did not possess the claimed video streaming technology as of 2013, let alone the asserted priority date in 2007.

1. '270 Patent

- **"identifier" / "identifier information" ('270 Patent, all asserted claims)**

"Identifier" and "identifier information" and all claims reciting an "identifier" or "identifier information" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for an

"identifier" or "identifier information" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"video communication" / "portions of the video communication" ('270 Patent, all asserted claims)**

"Video communication" and "portions of the video communication" and all claims reciting a "video communication" or "portions of the video communication" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "video communication" or "portions of the video communication" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"location[s] [on the network]" ('270 Patent, all asserted claims)**

"Location" and "locations on the network" and all claims reciting a "location" or "locations on the network" are invalid under § 112 for lack of written description. The specification does not

reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for ascertaining a "location on the network" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"broadcast" ('270 Patent, claims 71 and 124)**

"Broadcast" and all claims reciting a "broadcast" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "broadcast" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"without having to first establish an end-to-end connection over the network" ('270 Patent, all asserted claims)**

"Without having to first establish an end-to-end connection over the network" and all claims reciting "without having to first establish an end-to-end connection over the network" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly operate "without having to first establish an end-to-end connection over the network" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"plurality of servers cooperating" ('270 Patent, claim 47)**

"Plurality of servers cooperating" and all claims reciting a "plurality of servers cooperating" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "plurality of servers cooperating" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that

Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"video service infrastructure" ('270 Patent, claim 55)**

"Video service infrastructure" and all claims reciting a "video service infrastructure" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "video service infrastructure" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"conversation thread" / "conversation initiated by the video communication" ('270 Patent, claims 77, 113, 124)**

"Conversation thread" and "conversation initiated by the video communication" and all claims reciting a "conversation thread" or a "conversation initiated by the video communication" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "conversation thread" or "conversation initiated by the video communication" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors

had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"arranging to provide an application" ('270 Patent, claim 66)**

"Arranging to provide an application" and all claims reciting "arranging to provide an application" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly "arrang[e] to provide an application" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"exchange messages in response to the video message" ('270 Patent, claim 77)**

"Exchange messages in response to the video message" and all claims reciting "exchang[ing] messages in response to the video message" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly "exchange messages

in response to the video message" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"video media" ('270 Patent, claim 113)**

"Video media" and all claims reciting "video media" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for "video media" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

The '552 and '619 Provisionals also do not provide written description support for the asserted claims of the '270 Patent. For example, the '552 and '619 Provisionals fail to provide written description for the following claim terms: "identifier" / "identifier information" (all asserted claims); "video communication" / "portions of the video communication" (all asserted claims); "location[s] [on the network]" (all asserted claims); "broadcast" (claims 71 and 124); "without having to first establish an end-to-end connection over the network" (all asserted claims);

"plurality of servers cooperating" (claim 47); "video service infrastructure" (claim 55); "conversation thread" / "conversation initiated by the video communication" (claims 77, 113, 124); "arranging to provide an application" (claim 66); "exchange messages in response to the video message" (claim 77); and "video media" (claim 113).

2. '557 Patent

- **"identifier" ('557 Patent, claims 69-70, 78, 79, 88)**

"Identifier" and all claims reciting an "identifier" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for an "identifier" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"video message" / "video media of the video message" ('557 Patent, all asserted claims)**

"Video message" and "video media of the video message" and all claims reciting a "video message" or "video media of the video message" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products provide for a "video message" or "video media of the video message" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"ascertained bandwidth" ('557 Patent, all asserted claims)**

"Ascertained bandwidth" and all claims reciting an "ascertained bandwidth" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly use "ascertained bandwidth" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"without having to first establish an end-to-end connection over the network" ('557 Patent, all asserted claims)**

"Without having to first establish an end-to-end connection over the network" and all claims reciting "without having to first establish an end-to-end connection over the network" are

invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly operate "without having to first establish an end-to-end connection over the network" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"video message service infrastructure" ('557 Patent, all asserted claims)**

"Video message service infrastructure" and all claims reciting a "video message service infrastructure" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "video message service infrastructure" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"providing an application for execution" ('557 Patent, claims 17, 18)**

"Providing an application for execution" and all claims reciting "providing an application for execution" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly "provid[e] an application for execution" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"conversation thread" / "thread of messages" ('557 Patent, claims 70, 88)**

"Conversation thread" and "thread of messages" and all claims reciting a "conversation thread" or a "thread of messages" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "conversation thread" or "thread of messages" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation

based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"exchange second messages in response to the video message" ('557 Patent, claims 70, 88)**

"Exchange second messages in response to the video message" and all claims reciting "exchang[ing] second messages in response to the video message" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly "exchange second messages in response to the video message" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

The '619 Provisional also does not provide written description support for the asserted claims of the '557 Patent. For example, the '619 Provisional fails to provide written description for the following claim terms: "identifier" (claims 69-70, 78, 79, 88); "video message" / "video media of the video message" (all asserted claims); "ascertained bandwidth" (all asserted claims); "without having to first establish an end-to-end connection over the network" (all asserted claims); "video message service infrastructure" (all asserted claims); "providing an application for

execution" (claims 17, 18); "conversation thread" / "thread of messages" (claims 70, 88); and "exchange second messages in response to the video message" (claims 70, 88).

3. '516 Patent

- **"identifiers" ('516 Patent, all asserted claims)**

"Identifiers" and all claims reciting "identifiers" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for "identifiers" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"locations on the network" ('516 Patent, all asserted claims)**

"Locations on the network" and all claims reciting "locations on the network" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly ascertain "locations on the network" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore,

the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"video message service infrastructure" ('516 Patent, all asserted claims)**

"Video message service infrastructure" and all claims reciting a "video message service infrastructure" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "video message service infrastructure" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"segmented into a plurality of segments" ('516 Patent, all asserted claims)**

"Segmented into a plurality of segments" and all claims reciting video media "segmented into a plurality of segments" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for "segment[ing] into a plurality of segments" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"video message" ('516 Patent, all asserted claims)**

"Video message" and all claims reciting a "video message" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "video message" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"video media" ('516 Patent, claim 1)**

"Video media" and all claims reciting "video media" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for "video media" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"plurality of servers collectively configured" ('516 Patent, all asserted claims)**

"Plurality of servers collectively configured" and all claims reciting a "plurality of servers collectively configured" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "plurality of servers collectively configured" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the

extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"without having to first establish an end-to-end connection over the network" ('516 Patent, all asserted claims)**

"Without having to first establish an end-to-end connection over the network" and all claims reciting "without having to first establish an end-to-end connection over the network" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly operate "without having to first establish an end-to-end connection over the network" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

The '619 Provisional also does not provide written description support for claim 18 of the '516 Patent. For example, the '619 Provisional fails to provide written description for the following claim terms: "identifiers" (all asserted claims); "locations on the network" (all asserted claims); "video message service infrastructure" (all asserted claims); "segmented into a plurality of segments" (all asserted claims); "video message" (all asserted claims); "plurality of servers collectively configured" (all asserted claims); and "without having to first establish an end-to-end connection over the network" (all asserted claims).

4. ’883 Patent

- **“video message”/ “video media” (’883 Patent, all asserted claims)**

“Video message” and “video media” and all claims reciting a “video message” or “video media” are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs’ Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for “video media” or a “video message” as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs’ Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **“information from a first client device used by an initiating participant, the information for forwarding video media of a video message” (’883 Patent, claims 1, 4)**

“Information from a first client device used by an initiating participant, the information for forwarding video media of a video message” and all claims reciting “information from a first client device used by an initiating participant, the information for forwarding video media of a video message” are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for "information from a first client device used by an initiating participant, the information for forwarding video media of a video message" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"multi-media conversation" ('883 Patent, claims 1, 4)**

"Multi-media conversation" and all claims reciting a "multi-media conversation" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "multi-media conversation" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"ascertained bandwidth" ('883 Patent, claim 16)**

"Ascertained bandwidth" and all claims reciting an "ascertained bandwidth" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly use "ascertained bandwidth" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"selectively add to the multi-media conversation one or more additional messages that are generated in response to the video message" ('883 Patent, claims 1, 4)**

"Selectively add to the multi-media conversation one or more additional messages that are generated in response to the video message" and all claims reciting "selectively add to the multi-media conversation one or more additional messages that are generated in response to the video message" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly "selectively add to the multi-media conversation one or more additional messages that are generated in response to

the video message" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"communication infrastructure" / "video message service infrastructure" ('883 Patent, all asserted claims)**

"Communication infrastructure" and "video message service infrastructure" and all claims reciting a "communication infrastructure" or a "video message service infrastructure" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products provide for a "communication infrastructure" or "video message service infrastructure" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"without first setting up an end-to-end connection over the network" / "without having to first establish an end-to-end connection over the network" ('883 Patent, all asserted claims)**

"Without first setting up an end-to-end connection over the network" and "without having to first establish an end-to-end connection over the network" and all claims reciting "without first setting up an end-to-end connection over the network" or "without having to first establish an end-to-end connection over the network" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly operate "without first setting up an end-to-end connection over the network" or "without having to first establish an end-to-end connection over the network" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

The '552 and '619 Provisionals also do not provide written description support for the asserted claims of the '883 Patent. For example, the '552 and '619 Provisionals fail to provide written description for the following claim terms: "video message" / "video media" (all asserted claims); "information from a first client device used by an initiating participant, the information for forwarding video media of a video message" (claims 1, 4); "multi-media conversation" (claims 1, 4); "ascertained bandwidth" (claim 16); "selectively add to the multi-media conversation one or

more additional messages that are generated in response to the video message" (claims 1, 4); "communication infrastructure" / "video message service infrastructure" (all asserted claims); and "without first setting up an end-to-end connection over the network" / "without having to first establish an end-to-end connection over the network" (all asserted claims).

5. '929 Patent

- **"video message"/ "video media" ('929 Patent, all asserted claims)**

"Video message" and "video media" and all claims reciting a "video message" or "video media" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "video message" or "video media" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"information usable by the communication infrastructure for determining and notifying one or more second users of the communication infrastructure" ('929 Patent, all asserted claims)**

"Information usable by the communication infrastructure for determining and notifying one or more second users of the communication infrastructure" and all claims reciting "information usable by the communication infrastructure for determining and notifying one or more second

users of the communication infrastructure" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for "information usable by the communication infrastructure for determining and notifying one or more second users of the communication infrastructure" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"multi-media messaging conversation" ('929 Patent, all asserted claims)**

"Multi-media messaging conversation" and all claims reciting a "multi-media messaging conversation" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "multi-media messaging conversation" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that

Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"communication infrastructure including a plurality of servers on a network" ('929 Patent, all asserted claims)**

"Communication infrastructure including a plurality of servers on a network" and all claims reciting a "communication infrastructure including a plurality of servers on a network" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "communication infrastructure including a plurality of servers on a network" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

- **"without having to first establish an end-to-end connection over the network" ('929 Patent, all asserted claims)**

"Without having to first establish an end-to-end connection over the network" and all claims reciting "without having to first establish an end-to-end connection over the network" are invalid under § 112 for lack of written description. The specification does not reasonably convey to a POSITA that the inventors had possession of the claim limitation as of the filing date.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly operate "without

having to first establish an end-to-end connection over the network" as claimed. The specification does not describe the limitation in sufficient detail to demonstrate that the inventors had possession of this limitation as of the filing date. Furthermore, the specification does not support the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions. In addition, to the extent that Plaintiffs take the position that this limitation would have been obvious to a POSITA at the alleged priority date, it is not enabled.

The '552 Provisional also does not provide written description support for the asserted claims of the '929 Patent. For example, the '552 Provisional fails to provide written description for the following claim terms: "video message" / "video media" (all asserted claims); "information usable by the communication infrastructure for determining and notifying one or more second users of the communication infrastructure" (all asserted claims); "multi-media messaging conversation" (all asserted claims); "communication infrastructure including a plurality of servers on a network" (all asserted claims); and "without having to first establish an end-to-end connection over the network" (all asserted claims).

E. Lack of Enablement (35 U.S.C. § 112)

To satisfy the enablement requirement, "[t]he specification must contain sufficient disclosure to enable an ordinarily skilled artisan to make and use the entire scope of the claimed invention at the time of filing." *MagSil Corp. v. Hitachi Glob. Storage Techs., Inc.*, 687 F.3d 1377, 1381 (Fed. Cir. 2012). Courts consider multiple factors to determine whether experimentation is undue, including: "(1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims." *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988).

1. All Asserted Patents

- **"video message" / "video communication"**

"Video message," "video communication," and claims reciting "video message" or "video communication" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "video message" or "video communication" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

2. '270 Patent

- **"identifier" / "identifier information" ('270 Patent, all asserted claims)**

"Identifier," "identifier information," and claims reciting "identifier" or "identifier information" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for an "identifier" or "identifier information" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"video communication" / "portions of the video communication" ('270 Patent, all asserted claims)**

"Video communication," "portions of the video communication," and claims reciting "video communication" or "portions of the video communication" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "video communication" or "portions of the video communication" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"location[s] [on the network]" ('270 Patent, all asserted claims)**

"Location," "locations on the network," and claims reciting "location" or "locations on the network" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "location[s] on the network" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"video service infrastructure" ('270 Patent, claim 55)**

"Video service infrastructure" and claims reciting "video service infrastructure" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "video service infrastructure" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"broadcast" ('270 Patent, claims 71 and 124)**

"Broadcast" and claims reciting "broadcast" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "broadcast" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"without having to first establish an end-to-end connection over the network" ('270 Patent, all asserted claims)**

"Without having to first establish an end-to-end connection over the network" and claims reciting "without having to first establish an end-to-end connection over the network" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly operate "without having to first establish an end-to-end connection over the network" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"plurality of servers cooperating" ('270 Patent, claim 47)**

"Plurality of servers cooperating" and claims reciting "plurality of servers cooperating" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "plurality of servers cooperating" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"conversation thread" / "conversation initiated by the video communication" ('270 Patent, claims 77, 113, 124)**

"Conversation thread," "conversation initiated by the video communication," and claims reciting "conversation thread" or "conversation initiated by the video communication" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "conversation thread" or "conversation initiated by the video communication" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"arranging to provide an application" ('270 Patent, claim 66)**

"Arranging to provide an application" and claims reciting "arranging to provide an application" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for "arranging to provide an application" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"exchange messages in response to the video message" ('270 Patent, claim 77)**

"Exchange messages in response to the video message" and claims reciting "exchange messages in response to the video message" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for "exchang[ing] messages in response to the video message" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"video media" ('270 Patent, claim 113)**

"Video media" and claims reciting "video media" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for "video media" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

3. ’557 Patent

- **“identifier” (’557 Patent, claims 69-70, 78, 79, 88)**

“Identifier” and claims reciting “identifier” are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs’ Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for an “identifier” as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs’ Preliminary Infringement Contentions.

- **“video message” / “video media of the video message” (’557 Patent, all asserted claims)**

“Video message,” “video media of the video message,” and claims reciting “video message” or “video media of the video message” are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs’ Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a “video message” or “video media of the video message” as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs’ Preliminary Infringement Contentions.

- **"ascertained bandwidth" ('557 Patent, all asserted claims)**

"Ascertained bandwidth" and claims reciting "ascertained bandwidth" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly use "ascertained bandwidth" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"without having to first establish an end-to-end connection over the network" ('557 Patent, all asserted claims)**

"Without having to first establish an end-to-end connection over the network" and claims reciting "without having to first establish an end-to-end connection over the network" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly operate "without having to first establish an end-to-end connection over the network" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"video message service infrastructure" ('557 Patent, all asserted claims)**

"Video message service infrastructure" and claims reciting "video message service infrastructure" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "video message service infrastructure" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"providing an application for execution" ('557 Patent, claims 17, 18)**

"Providing an application for execution" and claims reciting "providing an application for execution" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for "providing an application for execution" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"conversation thread" / "thread of messages" ('557 Patent, claims 70, 88)**

"Conversation thread," "thread of messages," and claims reciting "conversation thread" or "thread of messages" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "conversation thread" or "thread of messages" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"exchange second messages in response to the video message" ('557 Patent, claims 70, 88)**

"Exchange second messages in response to the video message" and claims reciting "exchange second messages in response to the video message" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide "exchang[ing] second messages in response to the video message" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

4. ’516 Patent

- **“identifiers” (’516 Patent, all asserted claims)**

“Identifiers” and claims reciting “identifiers” are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs’ Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for “identifiers” as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs’ Preliminary Infringement Contentions.

- **“locations on the network” (’516 Patent, all asserted claims)**

“Locations on the network” and claims reciting “locations on the network” are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs’ Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for “locations on the network” as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs’ Preliminary Infringement Contentions.

- **"video message service infrastructure" ('516 Patent, all asserted claims)**

"Video message service infrastructure" and claims reciting "video message service infrastructure" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "video message service infrastructure" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"segmented into a plurality of segments" ('516 Patent, all asserted claims)**

"Segmented into a plurality of segments" and claims reciting "segmented into a plurality of segments" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide "segment[ing] into a plurality of segments" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"video message" ('516 Patent, all asserted claims)**

"Video message" and claims reciting "video message" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "video message" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"video media" ('516 Patent, claim 1)**

"Video media" and claims reciting "video media" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for "video media" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"plurality of servers collectively configured" ('516 Patent, all asserted claims)**

"Plurality of servers collectively configured" and claims reciting "plurality of servers collectively configured" are invalid under § 112 for lack of enablement. The specification fails to

enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "plurality of servers collectively configured" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"without having to first establish an end-to-end connection over the network" ('516 Patent, all asserted claims)**

"Without having to first establish an end-to-end connection over the network" and claims reciting "without having to first establish an end-to-end connection over the network" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly operate "without having to first establish an end-to-end connection over the network" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

5. ’883 Patent

- **“video message”/ “video media” (’883 Patent, all asserted claims)**

“Video message,” “video media,” and claims reciting “video message” or “video media” are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs’ Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for “video media” or a “video message” as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs’ Preliminary Infringement Contentions.

- **“information from a first client device used by an initiating participant, the information for forwarding video media of a video message” (’883 Patent, claims 1, 4)**

“Information from a first client device used by an initiating participant, the information for forwarding video media of a video message” and claims reciting “information from a first client device used by an initiating participant, the information for forwarding video media of a video message” are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs’ Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for

"information from a first client device used by an initiating participant, the information for forwarding video media of a video message" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"multi-media conversation" ('883 Patent, claims 1, 4)**

"Multi-media conversation" and claims reciting "multi-media conversation" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "multi-media conversation" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"ascertained bandwidth" ('883 Patent, claim 16)**

"Ascertained bandwidth" and claims reciting "ascertained bandwidth" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly use "ascertained

bandwidth" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"selectively add to the multi-media conversation one or more additional messages that are generated in response to the video message" ('883 Patent, claims 1, 4)**

"Selectively add to the multi-media conversation one or more additional messages that are generated in response to the video message" and claims reciting "selectively add to the multi-media conversation one or more additional messages that are generated in response to the video message" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly "selectively add to the multi-media conversation one or more additional messages that are generated in response to the video message" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"communication infrastructure" / "video message service infrastructure" ('883 Patent, all asserted claims)**

"Communication infrastructure," "video message service infrastructure," and claims reciting "communication infrastructure" or "video message service infrastructure" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks

an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "communication infrastructure" or "video message service infrastructure" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"without first setting up an end-to-end connection over the network" / "without having to first establish an end-to-end connection over the network" ('883 Patent, all asserted claims)**

"Without first setting up an end-to-end connection over the network," "without having to first establish an end-to-end connection over the network," and claims reciting "without first setting up an end-to-end connection over the network" or "without having to first establish an end-to-end connection over the network" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly operate "without first setting up an end-to-end connection over the network" or "without having to first establish an end-to-end connection over the network" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

6. '929 Patent

- **"video message"/ "video media" ('929 Patent, all asserted claims)**

"Video message," "video media," and claims reciting "video message" or "video media" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for "video media" or "video message" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"information usable by the communication infrastructure for determining and notifying one or more second users of the communication infrastructure" ('929 Patent, all asserted claims)**

"Information usable by the communication infrastructure for determining and notifying one or more second users of the communication infrastructure" and claims reciting "information usable by the communication infrastructure for determining and notifying one or more second users of the communication infrastructure" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for

"information usable by the communication infrastructure for determining and notifying one or more second users of the communication infrastructure" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"multi-media messaging conversation" ('929 Patent, all asserted claims)**

"Multi-media messaging conversation" and claims reciting "multi-media messaging conversation" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "multi-media messaging conversation" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"communication infrastructure including a plurality of servers on a network" ('929 Patent, all asserted claims)**

"Communication infrastructure including a plurality of servers on a network" and claims reciting "communication infrastructure including a plurality of servers on a network" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly provide for a "communication infrastructure including a plurality of servers on a network" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

- **"without having to first establish an end-to-end connection over the network" ('929 Patent, all asserted claims)**

"Without having to first establish an end-to-end connection over the network" and claims reciting "without having to first establish an end-to-end connection over the network" are invalid under § 112 for lack of enablement. The specification fails to enable a POSITA to make and use the full scope of this claimed limitation without undue experimentation. The specification lacks an adequate enabling disclosure that would have taught a POSITA how to practice the full alleged scope of this limitation.

Moreover, Plaintiffs' Preliminary Infringement Contentions fail to adequately disclose how Plaintiffs conceive of the phrase or how the Accused Products allegedly operate "without having to first establish an end-to-end connection over the network" as claimed. Furthermore, the specification does not provide sufficient enablement support for the full scope of this limitation based upon the allegations in Plaintiffs' Preliminary Infringement Contentions.

F. Improper Broadening in Reexamination (35 U.S.C. § 305)

35 U.S.C. § 305 expressly prohibits a patent owner from obtaining during reexamination any "amended or new claim enlarging the scope of a claim of the patent." The Federal Circuit applies a strict test: a reexamination claim is impermissibly broadened if it encompasses any conceivable apparatus or process that would not have infringed the original patent, even if the reexamination claim is narrower than the original claims in other respects. *See Hockerson-*

Halberstadt, Inc. v. Converse Inc., 183 F.3d 1369, 1374 (Fed. Cir. 1999); *In re Freeman*, 30 F.3d 1459, 1464 (Fed. Cir. 1994). The Federal Circuit has held that a violation of section 305 renders the enlarging claim invalid. *See Quantum Corp. v. Rodime, PLC,* 65 F.3d 1577, 1584 (Fed. Cir. 1995); *see also Thermalloy, Inc. v. Aavid Eng'g, Inc.*, 121 F.3d 691, 692, 694 (Fed. Cir. 1997).

All the asserted claims of the Asserted Patents that were amended or added on reexamination—including, without limitation, claims 71, 76, 77, 113, and 124 of the '270 Patent and claims 21, 69, 70, 78, 79, and 88 of the '557 Patent (collectively, "Reexam Claims")—are invalid under 35 U.S.C. § 305. The Reexam Claims broaden the scope of the patents as they claim subject matter that would not have infringed the original patents.

1. '270 Patent

Claims 113 and 124 of the '270 Patent, as construed by Plaintiffs, improperly enlarge the scope of the originally issued claims because they encompass processes that would not have infringed the original patent.

Specifically, claim 113 claims "the identifier usable for ascertaining one or more recipients of the video communication" which, as construed by Plaintiffs, adds subject matter that would not have infringed the original claims. By contrast, the original independent claims 1, 34, and 52 all require an "identifier identifying a recipient" of a video communication, claim 55 requires "identifier information identifying one or more recipients of a video communication[,]" and claim 22 requires "identifier information for a recipient of a video communication[.]" The original independent claims require an identifier or identifier information that identifies a recipient, whereas Voxer appears to construe claim 113 to require that the identifier is usable for ascertaining a recipient. To the extent Voxer construes claim 113 to encompass a method in which the identifier does not identify a recipient, claim 113 impermissibly broadens the scope of the '270 Patent. As asserted by Voxer, claim 113 also appears to remove the requirement in claim 34 that the "second

communication device" be "connected to the network." Rather, claim 113 requires "one or more second communication devices associated with the one or more recipients." To the extent Voxer construes claim 113 to encompass a method in which the second communication device is not connected to the network, claim 113 impermissibly broadens the scope of the '270 Patent. Voxer further appears to construe claim 113 to further remove the requirement that the ascertained location be used in delivering portions of the video communication, unlike original claims 1, 22, 34, 52, and 55. To the extent Voxer construes claim 113 to encompass a method in which the delivery of the video communication is accomplished without consideration of the ascertained location, claim 113 impermissibly broadens the scope of the '270 Patent. For at least the above reasons, claim 113 improperly broadens the scope of the '270 Patent, rendering claim 113 invalid. Claim 124, which depends on claim 113, is invalid for the same reasons. Additionally, to the extent that "broadcast" is construed to permit the video message to be directed to persons who are not "recipients" as required by claims 1, 22, 34, 52, and 55, claim 124 impermissibly broadens the scope of the '270 Patent.

Additionally, to the extent Voxer contends that the newly added language of claims 71, 76, or 77 modifies a limitation incorporated from claim 34—for example, by contending that the "broadcast" as recited in claim 71 permits the video message to be directed to persons who are not "recipients" as required by claim 34 or that the limitation in claim 76 of "identifying a plurality of users … from the identifier" permits infringement where the identifier does not itself "identify[] a recipient" as expressly required by claim 34—claims 71, 76, and 77 would also be invalid for impermissibly enlarging the scope of the '270 Patent under 35 U.S.C. § 305. *See ArcelorMittal France v. AK Steel Corp.*, 786 F.3d 885, 890 (Fed. Cir. 2015) (invalidating reissue

claims where reissue resulted in "the addition of a dependent claim which ha[d] the practical effect of expanding the scope of claim 1").

2. '557 Patent

Claims 78, 79, and 88 are invalid under 35 U.S.C. § 305 for improperly broadening the scope of the '557 Patent. For example, independent claim 1 of the '557 Patent requires selecting a degraded version based on available network bandwidth for delivering video media from the video-message-service infrastructure to "a recipient device on the network." Claim 1 further requires transmission of that selected version to "the recipient device." As asserted and interpreted by Voxer, claim 78 does not repeat the limitation that the recipient device be "on the network." Instead, claim 78 recites using an identifier to ascertain "one or more recipients," selecting degraded versions based on bandwidth for delivering the video to "one or more recipient devices associated with the one or more recipients," and transmitting and delivering the selected version to those devices. Unlike claim 1, claim 78, as asserted and construed by Voxer, does not expressly require that each "recipient device" itself be "on the network." To the extent Voxer contends that claim 78 encompasses selecting degraded versions based on bandwidth for delivering to a recipient device that is not itself on the claimed network—for example, a device reached through a gateway, intermediary, downstream network, or other communications infrastructure—claim 78 is broader than the original claims of the '557 Patent. To the extent claim 78 is construed to encompass transmitting the selected degraded video over the recited network toward an intermediary and ultimately delivering it to an associated recipient device that is not itself "on the network" (*see, e.g.*, '557 Patent at Fig. 7, 25:48-63), claim 78 improperly broadens the scope of the '557 Patent. Claims 79 and 88, which depend on claim 78, are invalid for the same reasons.

Claim 21, as amended during reexamination, is likewise invalid under 35 U.S.C. § 305. As originally issued, claim 21 recited "[t]he method of claim 1 further configured to provide a

notification of the video message to the recipient device." During reexamination, Voxer deleted "configured to provide" and broadened the claim to recite "[t]he method of claim 1, further comprising: providing a notification of the video message to the recipient device." The original language of claim 21 imposed a requirement concerning the configuration or capability of the claimed video message service infrastructure. Original claim 21 therefore required, at minimum, that the claimed video message service infrastructure be able to provide the notification to the recipient device. As amended, claim 21 now requires only the act of "providing a notification." The amended language removed the requirement that the video message service infrastructure itself must be configured to provide the notification. It is conceivable that one could potentially satisfy amended claim 21 by notifying the recipient device using a separate client application or third-party notification service that is not part of the claimed video message service infrastructure. Such a set-up, however, would not satisfy the original claim 21 of the '557 Patent because it expressly required the video message service infrastructure to be "configured to provide a notification of the video message to the recipient device."

Additionally, to the extent Voxer contends that the newly added language of claims 69 or 70 modifies a limitation incorporated from claim 1—for example, by contending that the "receiving device" recited in claim 69 need not satisfy the requirements applicable to the "recipient device" of claim 1, or that the new plurality-of-users functionality permits infringement without satisfying claim 1 with respect to an individual recipient device—claims 69 and 70 would also be invalid for impermissibly enlarging the scope of the '557 Patent under 35 U.S.C. § 305. *See ArcelorMittal France v. AK Steel Corp.*, 786 F.3d 885, 890 (Fed. Cir. 2015) (invalidating reissue claims where reissue resulted in "the addition of a dependent claim which ha[d] the practical effect of expanding the scope of claim 1").

VI. DOCUMENT PRODUCTIONS

Defendants have produced, in a production accompanying service of these contentions, the documents cited herein and in the attached appendices and exhibits which support their invalidity contentions. Defendants reserve the right to produce and rely on additional documents in view of, for example, additional information revealed regarding Voxer's allegations and/or any amendments or supplements to Voxer's infringement contentions. Defendants further reserve all rights to amend and/or supplement their production with any necessary authentication documentation, including but not limited to Internet Archive Wayback Machine authentications regarding the publication dates of any publicly available information relied upon herein.

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CERTIFICATE OF SERVICE

I hereby certify that on September 3, 2026, true and correct copies of the foregoing document were caused to be served on the following counsel of record as indicated:

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