

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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SLACK TECHNOLOGIES, LLC. and  
SALESFORCE, INC.,  
Petitioners,

v.

WRINKL, INC.,  
Patent Owner

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Case No.: IPR2024-01489  
U.S. Patent No. 11,973,731

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**DECLARATION OF DR. ANDREW COCKBURN  
IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW  
OF U.S. PATENT NO. 11,973,731**

Mail Stop “**Patent Board**”  
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P.O. Box 1450  
Alexandria, VA 22313-1450

I hereby declare that all the statements made in this Declaration are of my own knowledge and true; that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001.

I declare under the penalty of perjury that all statements made in this Declaration are true and correct.

Executed September 26, 2024 in Lyttelton, New Zealand.

A handwritten signature in black ink, appearing to read 'Dr. Andrew Cockburn', is positioned above a horizontal line.

DR. ANDREW COCKBURN

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## **I. INTRODUCTION**

1. My name is Andrew Cockburn. I have been engaged by Slack Technologies, LLC and Salesforce, Inc. (collectively, “Petitioners”) to investigate and opine on certain issues related to U.S. Patent No. 11,973,731, titled “System and Methods for Subsidiary Channel-Based Thread Communications” (“’731 Patent”) (Exh-1001).

2. I understand that the ’731 Patent has been assigned to Wrinkl, Inc. (“Wrinkl”). Wrinkl is also referred to as the “Patent Owner” in this document.

3. In this declaration, I will discuss the technology related to the ’731 Patent, including an overview of the relevant field of art. This overview of the technology provides some of the bases for my opinions with respect to the ’731 Patent.

4. This declaration is based on the information currently available to me. To the extent that additional information becomes available, I reserve the right to continue my investigation and study and provide updated opinions as appropriate.

5. In forming my opinions, I have relied on information and evidence identified in this declaration, including without limitation the ’731 Patent, U.S. Application No. 15/858,696 (the “’696 Application”), which issued as U.S. Patent No. 10,025,475 (the “’475 Patent”) and Provisional Application No. 62/666,137 (the “’137 Provisional”) and prior art including U.S. Pub. No. 2017/0134316

(“Cohen”), more specifically identified below. I have also relied on my own experience and expertise in the technologies and systems that were already in use prior to, and within the timeframe of the earliest priority date of the claimed subject matter in the ’731 Patent, June 21, 2018, as well as shortly thereafter.

## **II. OVERVIEW**

### **A. Relevant Training, Experience, and Background.**

6. My general qualifications are included in the attached CV as Exhibit 1004. I am a Professor at the Department of Computer Science and Software Engineering at the University of Canterbury, New Zealand. I also currently head the HCI (Human-Computer Interaction) and Multi-Media research group at the University of Canterbury.

7. In 1988, I was awarded a Bachelor of Science with Honors in Computer Science from the University of York, England.

8. In 1993, I was awarded a Ph.D. from the University of Stirling, Scotland. My thesis was on “Computer Supported Cooperative Work” which relates to forms of group interaction supported on computers.

9. In 1993, I joined the University of Canterbury as a Lecturer in the Department of Computer Science (now the Department of Computer Science and Software Engineering). I was subsequently promoted to a Senior Lecturer, and

then an Associate Professor, before my appointment as a Professor in 2010. I currently hold the title of Professor.

10. I have over 30 years of experience in the area of HCI. The field of HCI is generally concerned with ways of understanding and improving the interaction between humans and computers, with a view to understanding, evaluating, designing, and building new styles of interactions that improve on one or more of the end goals of making computers faster to learn, more intuitive, more efficient to use, and more subjectively satisfying.

11. Throughout my career, I have published the results of many research projects that have involved building new user interfaces or reviewing existing user interfaces for performing a particular task, and evaluating their effectiveness. This includes publications relating to:

- a) designing and implementing graphical user interfaces for group communication;
- b) investigating user experiences with web navigation interfaces, for example when using the “back” button on web browsers;
- c) reviewing and improving various interface schemes for traversing through documents in computer applications, including zooming, scrolling, and other techniques;

- d) analyzing new interfaces for text entry on mobile and touch-sensitive devices;
- e) addressing the problems arising from the small form factor of mobile devices with touch-sensitive displays;
- f) examining the influence of haptic feedback on user performance with mouse and touchscreen input devices;
- g) evaluating the importance of spatially stable displays in user interfaces; and
- h) designing, analyzing and evaluating gesture-based input techniques for various user activities, including music data entry, web navigation, text entry, and scrolling.

12. I also have extensive experience in designing and building new user interfaces and reviewing existing user interfaces. This includes a number of projects regarding the design, development and evaluation of user interfaces that I have undertaken with companies in the computing and HCI industry, such as:

- a) working with Airbus SAS in 2016 on methods to assist pilots' gesture-based interaction with touchscreens in turbulent environments;

- b) working with Hewlett-Packard Research Labs from 2010-2012 on the design and evaluation of gesture-based pointing techniques for remote displays, such as interactive TVs;
- c) a number of projects from 2006-2010 working with Logitech on the design, development, evaluation and improvement of user interfaces for next generation mice, including in relation to scrolling and window management tasks;
- d) working with IBM Almaden Research in 2006 on the design, development and evaluation of user interfaces for gesture-based text entry on mobile devices;
- e) working with Digit Wireless in 2002 on the evaluation of user performance for user interfaces for digital text entry on mobile devices; and
- f) working with Microsoft Research in 1999 on the development, evaluation, and improvement of user interfaces for web browsing, in particular the mechanisms for revisiting pages (such as through the “back” button or bookmarks).

13. At the University of Canterbury, I currently teach a course on HCI for final year undergraduate students and a course on research methods in HCI for postgraduate students.

14. In the past, I have also taught introductory computer programming courses for first year students across disciplines, which included the implementation of graphical user interfaces.

15. I also manage an active research lab with a number of Ph.D. students. I have previously supervised fifteen students to successful completion of their Ph.D.s in the field of HCI.

16. The Association for Computing Machinery (ACM) is the world's largest scientific and educational computing society. In 2015, I was elected to the ACM Conference on Human Factors in Computing Systems (CHI) Academy, which honors the principal leaders of the field of HCI.

17. I also annually attend conferences relating to the field of HCI and regularly read journals that cover research in the field of HCI.

18. To keep abreast with industry trends, I regularly read broader journals, magazines and websites related to computer science and technology, including Communications of the ACM, ACM TechNews, BBC Technology, and New York Times Technology.

19. A detailed list of my other professional activities, memberships, and speaking engagements is included in my CV.

**B. Compensation.**

20. I am being compensated at the rate of \$600 per hour for my work on this declaration. My fee is not contingent on the outcome of any matter or on any of the technical positions I explain in this declaration.

21. I have no financial interest in Petitioners. I have been informed that Wrinkl claims ownership of the '731 Patent. I have no financial interest in Wrinkl.

**C. Documents and Materials Relied Upon.**

22. My opinions in this Declaration are based on working in the field of HCI, including my teaching, research, and consulting related to human interactions with computing devices. I have an established understanding of the relevant field at the relevant timeframe, and I have an understanding of the skill set, capabilities, and knowledge of a person having ordinary skill in the art ("PHOSITA") as of June 21, 2018.

23. As I indicated, I supervised Ph.D. students in the field of HCI at the University of Canterbury at the relevant time. I also had the opportunity to become familiar with the efforts of the industry during this timeframe to improve human interactions with computing devices, the studies of various researchers in the field, and generally the level of knowledge of those in the art concerning human interactions with computing devices.

24. My opinions are also based on investigation and study of the patent at issue, its file history (Exh-1002), and the prior art. In the course of forming my opinions, I have reviewed all the exhibits submitted herewith, identified in Appendix A.

25. I may rely upon these materials and/or additional materials to rebut arguments raised by the Patent Owner. Further, I may also consider additional documents and information in forming any necessary opinions including documents that may not yet have been provided to me.

### **III. STATEMENT OF LEGAL PRINCIPLES**

#### **A. Claim Construction.**

26. I understand that the '731 Patent is an unexpired patent. Petitioners' counsel has advised me that claim terms are to be construed according to the same standard that is used to construe the claim in a civil action in federal district court. This standard replaced the "Broadest Reasonable Interpretation" standard previously used in *inter partes* review of an unexpired patent. I have been informed that the applicable standard gives meaning to the term that the term would have to a person of ordinary skill in the art in question at the time of the invention. This includes the word in the context of the claim it appears and in context of the patent specification. A patentee is entitled to be his own lexicographer, and when so, the meaning the patentee provides a word governs.

The prosecution history can also provide a guide as to a term's meaning, which is the complete record of the proceedings before the USPTO and includes the prior art cited during examination. Extrinsic evidence is less significant and is considered less reliable than the intrinsic record in determining the legally operative meaning, but it may be considered to shed useful light on the relevant art. Thus, evidence external to the patent can also be used, including expert and inventor testimony, dictionaries, and learned treatises.

**B. Anticipation.**

27. Petitioners' counsel has advised that in order for a patent claim to be valid, the claimed invention must be novel. They have further advised that if each and every element of a claim is disclosed in a single prior art reference, then the claimed invention is anticipated, and the invention is not patentable according to 35 U.S.C. § 102. In order for the invention to be anticipated, each element of the claimed invention must be described or embodied, either expressly or inherently, in the single prior art reference. In order for a reference to inherently disclose a claim limitation, that claim limitation must necessarily be present in the reference. Petitioner's counsel has also advised that a prior art reference must be enabling in order to anticipate a patent claim.

**C. Obviousness.**

28. Petitioners' counsel has also advised me that obviousness under 35 U.S.C. § 103 is a basis for invalidity. Specifically, I understand that where a prior art reference discloses less than all of the limitations of a given patent claim, that patent claim is invalid if the differences between the claimed subject matter and the prior art reference are such that the claimed subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the relevant art. Obviousness can be based on a single prior art reference or a combination of references that either expressly or inherently disclose all limitations of the claimed invention.

29. I understand that obviousness is not driven by a rigid formula but is a flexible inquiry that reflects the fact that a person of ordinary skill in the art exercising ordinary creativity may find a variety of reasons to combine the teachings of different references. I understand that a non-exclusive list of possible factors that may give a person of ordinary skill in the art a reason to combine references includes combining elements according to known methods to yield predictable results; simple substitution of known elements to obtain predictable results; use of known techniques to improve similar devices in the same way; applying known techniques to known devices ready for improvement to yield predictable results; choosing from a finite number of identified, predictable

solutions, with a reasonable expectation of success; known work in one field of endeavor prompting variations of it for use in the same field; and teaching in the prior art that would have led one of ordinary skill to combine prior art reference teachings to arrive at the claimed invention.

**D. Written Description.**

30. Petitioners' counsel has advised that, for a patent claim to satisfy the written description requirement, the specification must clearly describe the claimed invention in sufficient detail to demonstrate that the inventor was in possession of the invention at the time of filing. Furthermore, they have explained that the description must convey to a person of ordinary skill in the art that the inventor had conceived and disclosed each element of the claimed invention. The written description must support every feature and limitation of the claims, ensuring that the scope of the invention is fully captured within the patent's specification. Inadequate description of any element or limitation can result in a claim being invalid for lack of written description under 35 U.S.C. § 112, as it would not sufficiently show the inventor's possession or understanding of the invention at the time of filing.

**IV. THE '731 PATENT**

31. The '731 Patent, titled "System and Methods for Subsidiary Channel-Based Thread Communications," pertains to a method and apparatus for real-time

electronic communications, specifically focusing on generating and displaying subsidiary channel-based thread communications within a group-based messaging system. Exh-1001 at Abstract. It purports to address the limitations of traditional electronic chat communications, which are constrained by a sequential, read-only, chronological format, particularly in large project chats. *Id.* at 2:37–62. The patent alleges that such innovation is crucial for enhancing real-time communication and efficiency in collaborative settings, where quick, multi-person chat interactions purportedly can prevent costly errors and save time. *Id.*

32. The '731 Patent proposes techniques for incorporating actionable objects into online chat communication platforms to enhance interactivity and effectiveness. *Id.* at 3:36–42. These techniques purport to improve chat messaging technology by integrating user-perceivable, executable objects within chat sessions, which are processed by a client device to facilitate communication among participants. *See id.*; *see also id.* at 3:56–4:16.

33. Specifically, the patent details a process involving the reception of a messaging communication on a platform, its display within a messaging pane, and the subsequent creation of a subsidiary thread communication upon a thread request. *Id.* at Abstract. Upon creation of a subsidiary thread, an actionable item may appear adjacent to the initial message, which is selectable by users. *Id.*; *see also* Claim 1 and 30. Upon selection, a subsidiary thread communication is

displayed in a separate pane, allowing the list pane, messaging pane, and thread communication pane to be simultaneously visible within a defined display window. *Id.* This setup allegedly enhances user engagement and communication efficiency by providing a more interactive and comprehensive chat interface. *See id.* at 2:37–62.



*Id.* at FIG. 10F.

## V. OVERVIEW OF THE STATE OF THE ART

34. The '731 Patent discusses the integration of actionable objects into group-based messaging systems, focusing on features like subsidiary threads and simultaneous display panes within a chat interface. Exh-1001 at Abstract, 2:40–44. The purported invention purports to address “problems in chat technology of

disjointed, ad hoc electronic communications.” *Id.* at 3:60–61. It also purports to “address[] the problem of discussion archival and retrieval and by further still integrating actionable objects such as ‘Tasks’, ‘Ideas’, ‘Events’, ‘Surveys’, etc., into the system. This allows messages (e.g., chat messages) to be ‘typed’ making them organized, searchable, referenceable, context oriented and actionable thereby enhancing communications, saving time and increasing productivity of users.” *Id.* at 4:3–6.

35. Yet, by the time the ’731 Patent was filed, the field of electronic chat communications was already well-developed, with platforms like Internet Relay Chat (IRC), AOL Instant Messenger (AIM), Gaim (now Pidgin), MSN Messenger (later rebranded as Windows Live Messenger) offering various messaging functionalities.

36. For example, IRC, one of the earliest and most influential platforms, enabled real-time chat and established the foundational structure for group conversations, where messages were displayed sequentially and visible to all participants. Despite its simplicity, IRC allowed for topic-based channels, private messaging, and rudimentary command-based actions, laying the groundwork for more sophisticated communication systems.

37. The ’731 Patent in particular describes the integration of “actionable objects,” which are interactive, selectable areas within a user interface. These

objects allow users to trigger specific actions or functions. For example, a user might click or tap an actionable object to perform tasks like creating a poll, viewing or summarizing a discussion thread, or managing tasks within a collaborative environment.

38. This functionality, however, is not novel and is obvious in light of prior developments in the field. For example, before the filing of the '731 Patent, platforms like AIM and Gaim had already integrated these types of controls to streamline user interaction and enhance communication efficiency. These existing platforms enabled features like cross-channel messaging and private chats. *See* Exh-1018. The inclusion of actionable objects in the '731 Patent represents a natural progression of these established concepts, as embedding tasks and polls within a chat environment builds directly on existing methods of enhancing communication efficiency. Given these precedents, the claimed features are obvious extensions of known techniques for optimizing chat interfaces, rather than a novel invention.

39. The '731 Patent further describes a system where users can generate subsidiary threads, represented by thread summary indicators, to manage related conversations within the same interface. This feature, as illustrated in FIGS. 4A-4E and FIGS. 10A-10I of the patent, aimed to create a more organized and context-sensitive communication experience. However, such capabilities were also a

natural extension of existing technologies that had already begun to address the limitations of linear chat systems. The concept of managing threads or sub-conversations was not novel, as platforms like IRC, AIM, Gaim, and MSN Messenger had already allowed users to segment conversations by topic or through separate chat channels, achieving similar organizational goals. This is shown, for example, in Figure 3 below, which depicts an early IRC interface that already allowed chats to be organized and grouped by different channels.

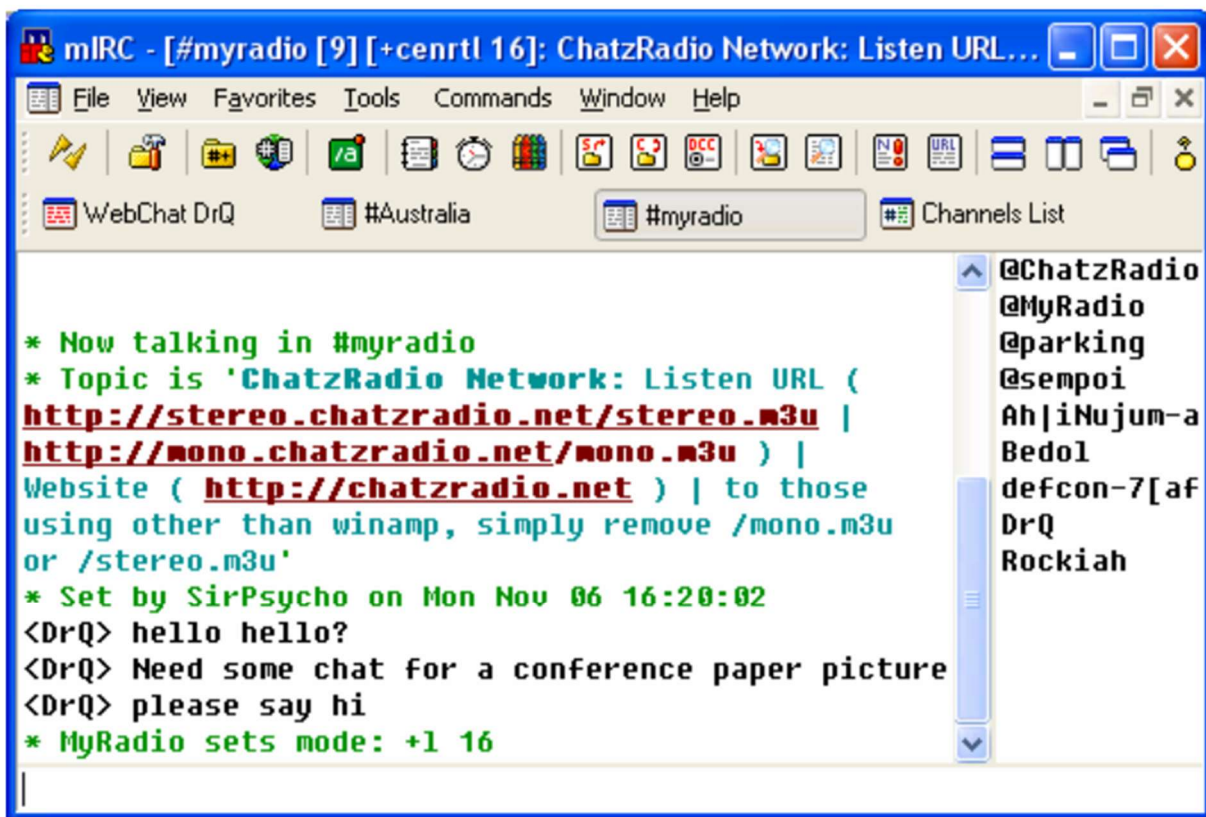


**Figure 3. Typical IRC User Interface (MIRC)**

Exh-1010.

## **VI. ORDINARY SKILLED ARTISAN**

40. In my opinion, a person having ordinary skill in the art at the time of the alleged invention (“PHOSITA”) is a person with at least a bachelor’s degree in computer science or a related degree, and at least four years of experience with graphical user interfaces, and at least two years of experience in the graphical user interface field. Alternatively, a person of ordinary skill in the art would have a master’s degree in computer science (or similar discipline) and at least two years of similar experience.

## **VII. CLAIM CONSTRUCTION**

41. For purposes of this declaration, I have been instructed to construe the claim terms in the ’731 Patent based on their plain and ordinary meaning that they would have to a PHOSITA in view of the intrinsic evidence. My interpretation of the claim terms is further explained for each claim limitation in relation to the prior art discussed in invalidity Ground 1 below.<sup>1</sup>

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<sup>1</sup>Petitioners and I reserve the right to address any claim construction positions taken by the Patent Owner in its Preliminary Response, including under 37 C.F.R. § 42.108(c). Petitioners and I further reserve our right to pursue different claim construction positions in *Wrinkl, Inc. v. Slack Technologies, LLC et al.*, No. 1:24-cv-00620 (D. Del.), including as part of their defense that the claims are invalid under 35 U.S.C. § 112, which cannot be presented here.

## VIII. OFFERED ART

### A. U.S. Pub. No. 2017/0134316 (“Cohen”) (Exh-1005)

42. Cohen is a publication of U.S. Patent App. No. 15/293,620, titled “Integrating Actionable Objects into an On-line Chat Communications Platform,” and was published on May 11, 2017. Exh-1005.

43. Cohen has virtually the same disclosure as the ’731 Patent, although the ’731 Patent includes additional figures and further description concerning “Sidebars and Asymmetrical Group Messaging Views.” Nevertheless, Cohen discloses the same basic group chat functionality as the ’731 Patent. Specifically, Cohen describes a system “integrating actionable objects into an on-line chat communications platform.” Cohen at Abstract. The actionable objects allow users to interact with specific, perceivable actions during chat sessions, providing an “interactive presentment of messaging activity.” *Id.* at [0049]. Cohen discloses a sidebar conversation feature that enables private one-on-one chats within a larger group, allowing participants to communicate directly without disrupting the group discussion. *Id.* at [0072]–[0073]. Cohen also discloses bundle communications, which let users group important messages from a chat into bundles for future reference, enabling easier management of key information and decisions. *Id.* at [0080]–[0081]. This system is meant to streamline communication by combining

interactive tools with flexible private messaging and message management options among multiple interfaces and channels as illustrated in Figure 5A:

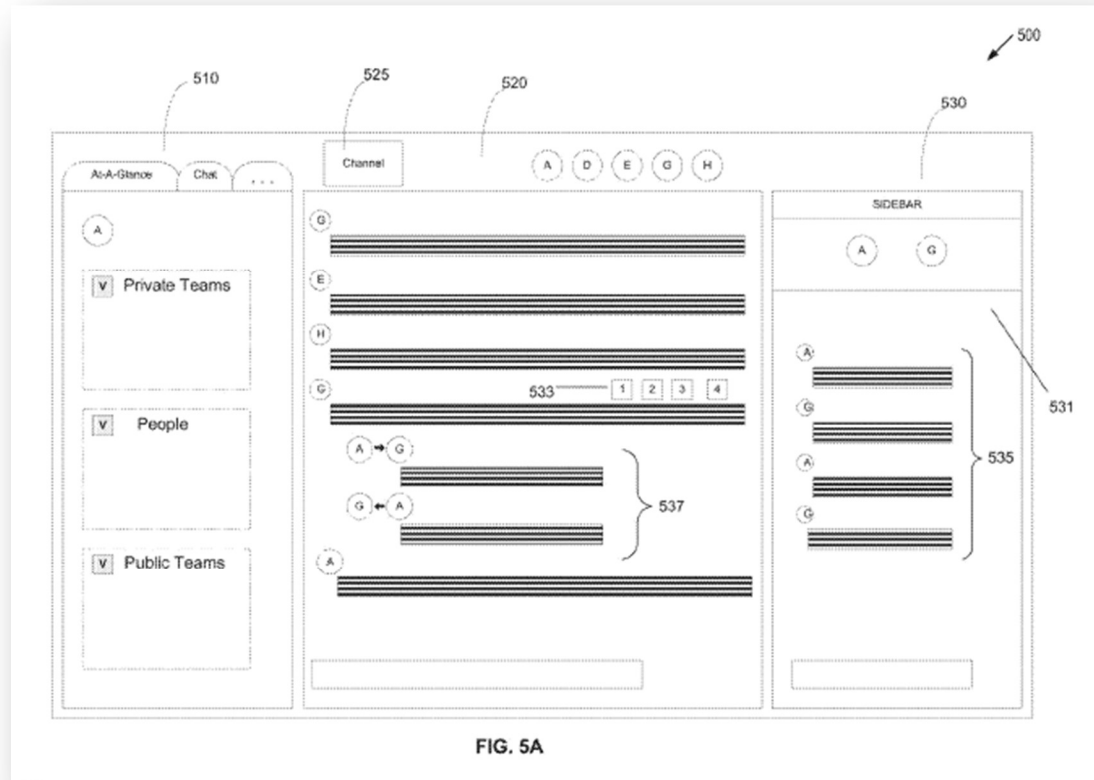


FIG. 5A

*Id.* at FIG. 5A.

## IX. WRITTEN DESCRIPTION OF THE '696 APPLICATION AND '137 PROVISIONAL

44. I understand from counsel that Patent Owner claims that the '731 Patent should be accorded a priority date of November 10, 2015, based on a chain of prior related patent filings, including U.S. Application No. 15/858,696 (the "'696 Application") (Exh-1013), which issued as U.S. Patent No. 10,025,475 (the "'475 Patent") (Exh-1014) and Provisional Application No. 62/666,137 (the "'137

Provisional”) (Exh-1015). I was asked by counsel to determine whether the ’696 Application and the ’137 Provisional provide a written description for the limitations that appear in the claims of the ’731 Patent.

45. In my opinion the ’696 Application and the ’137 Provisional fail to disclose the simultaneous display (or “viewable simultaneously”) of three panes, with the third pane being a subsidiary communication thread—a necessary element found in all four of the independent claims of the ’731 Patent.

46. Independent claims 1, 15, and 25 of the ’731 Patent all specify that a “third pane” is required, to display the “first messaging communication” within a “first subsidiary communication thread” that includes an anchor message and any additional messaging communication, along with an associated sidebar text-entry field distinct from the channel text-entry field, with the third pane and sidebar text-entry field displayed simultaneously alongside the first pane, second pane, and channel text-entry field. *See* Sections X.A.10-11, X.A.15, X.O.9-10, X.O.14, X.Y.9-10, X.Y.14. Additionally, independent claim 30 of the ’731 Patent requires “rendering of the subsidiary thread communication to a thread communication pane within the communication interface, wherein a list pane, the messaging pane, and the thread communication pane are configured to be rendered within a defined display window as viewable simultaneously” (i.e., three panes). *See* Section X.DD.7.

47. The '696 Application and '137 Provisional do not disclose a third pane with a sidebar text entry field and a subsidiary communication thread, nor does it disclose a third pane that is simultaneously displayed/viewable with the first and second pane disclosed in claims 1, 15, 25, or 30. For example, the '696 Application teaches referencing objects and drafting direct replies to specific messages, all within a single message stream, while the '137 Provisional focuses on cross-channel communication, bundling, and tag functionality. *See* Exh-1013; Exh-1015. Neither, however, teaches a third pane viewed simultaneously, including both a sidebar text-entry field and a subsidiary communication thread. Therefore, the '696 Application and '137 Provisional fail to adequately disclose and provide a written description for limitations found in the claims of the '731 Patent.

#### **X. GROUND 1: COHEN ANTICIPATES CLAIMS 1-30**

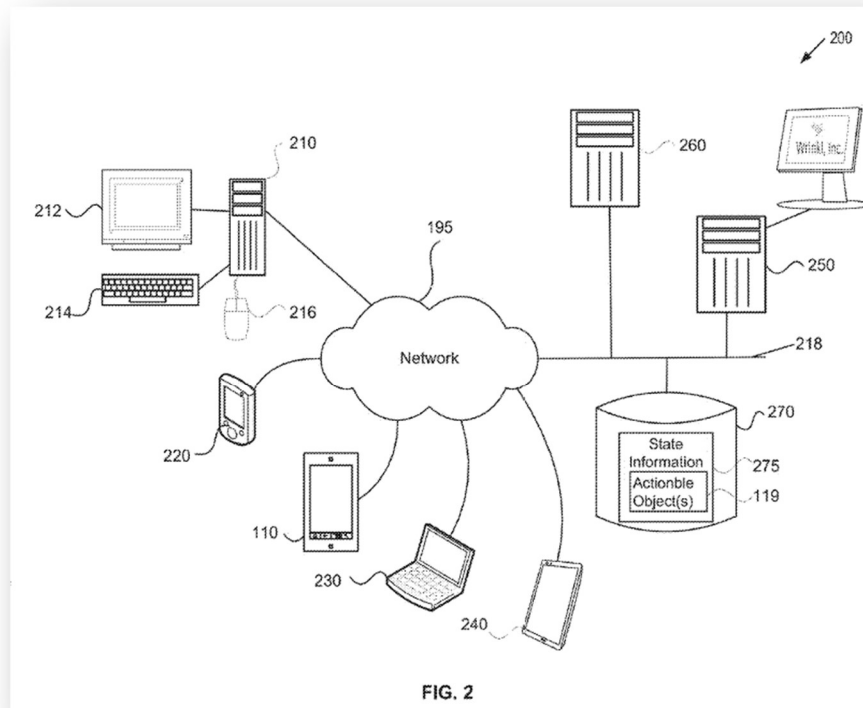
48. Cohen (Exh-1005), published on May 11, 2017, predates what I have been informed is the proper priority date for the '731 Patent (June 21, 2018) by more than a year. Cohen is a patent publication from a preceding ancestral application (the '620 Application) and clearly anticipates the later-filed '731 Patent. The disclosures in Cohen and the '731 Patent are nearly identical, with Cohen explicitly disclosing the concepts subsequently claimed in the '731 Patent. To the extent the Patent Owner argues that Cohen does not anticipate any claims

based on this disclosure, it is important to note that Cohen expressly states that: “Whereas many alterations and modifications of the disclosure will no doubt become apparent to a person of ordinary skill in the art after having read the foregoing description, it is to be understood that any particular implementation shown and described by way of illustration is in no way intended to be considered limiting.” Exh-1005 at [0108]; *see also id.* at [0004].

**A. Independent Claim 1**

- 1. 1[pre] An apparatus for use with a group-based communication system to facilitate messaging communication over a network between users of said system, comprising:**

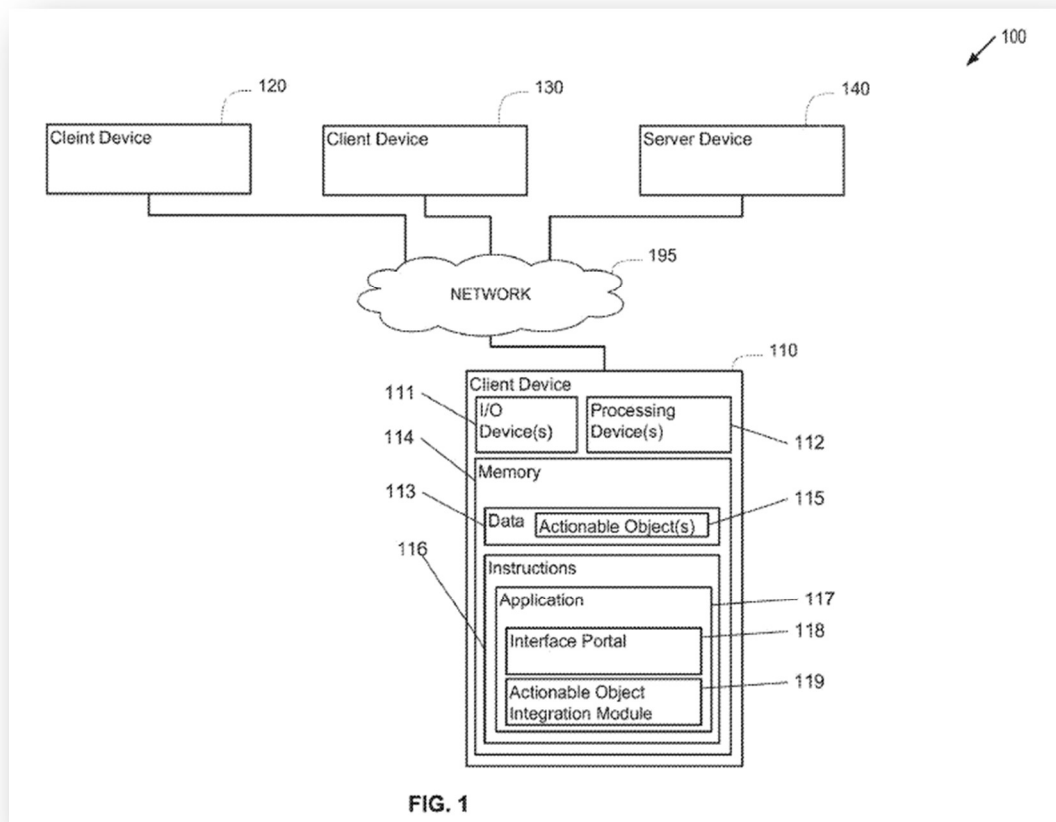
49. To the extent that the preamble is limiting, it is my opinion that Cohen anticipates this limitation. Cohen explicitly discloses an apparatus: “Examples described herein also relate to an *apparatus* for performing the methods described herein.” Exh-1005 at [0106] (emphasis added); *see also id.* at [0107]. The apparatus disclosed in Cohen is used with a group-based communication system permitting users to communicate within a “group chat conversation.” *Id.* at [0037]. “The system 100 may facilitate the transfer of electronic communications between computing devices of two or more users or participants over a communication network.” *Id.* at [0022]. Figure 2 depicts such a group-based communication system to facilitate messaging communication over a network between users:



*Id.* at FIG. 2. Thus, Cohen discloses this limitation.

2. **1[a] a processor, and a memory associated with said processor having computer coded instructions therein, with said computer coded instructions configured to, when executed by said processor, cause the apparatus to:**

50. It is my opinion that Cohen discloses this limitation. Cohen discloses that “computing devices of system 100, such as client device 110, may include one or more I/O (input/output) devices 111, processors 112, memory 114, and other components typically present in general purpose computers. ‘Processor’ or ‘Processing device’ herein refers to a device capable of executing instructions encoding arithmetic, logical, or I/O operations.” *Id.* at [0025]. Figure 1 depicts such a computing device:



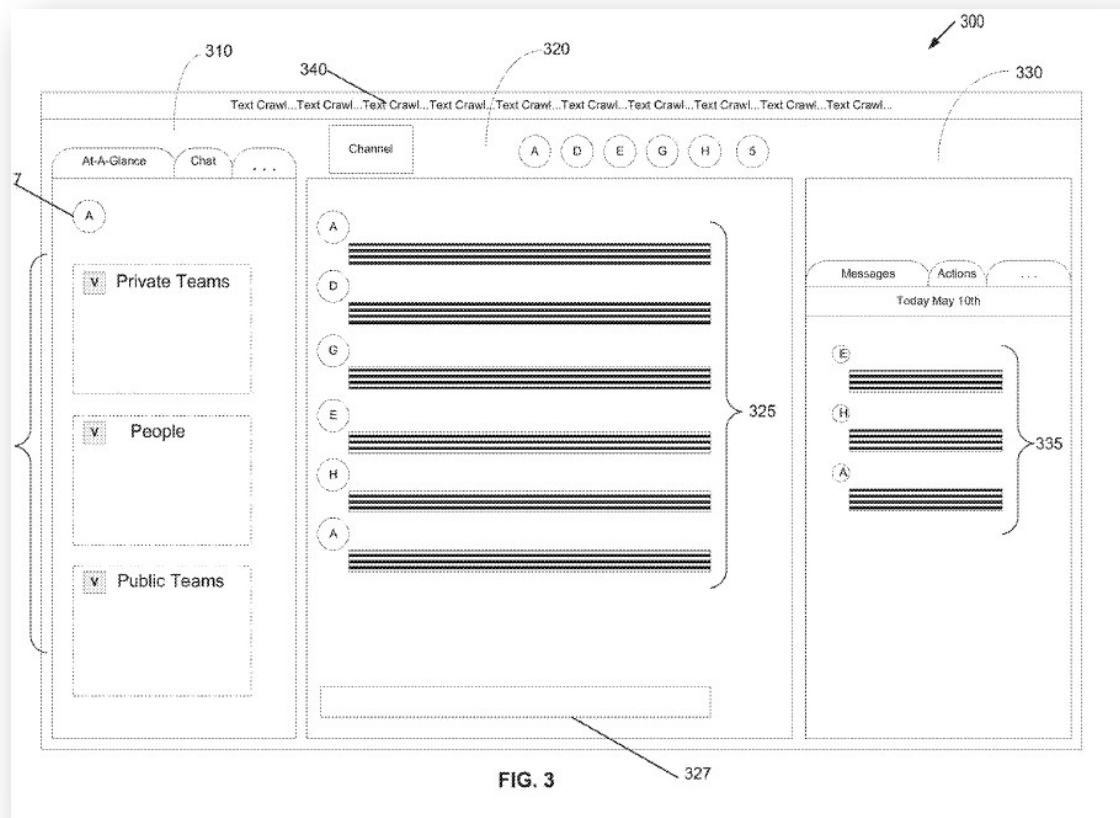
*Id.* at FIG. 1. Because the processors execute instructions for each function, Cohen teaches the computer coded instructions. *Id.* at FIG. 9 (*see* processing device 902). Thus, Cohen discloses this claim limitation.

**3. 1[b] generate a group-based communication interface on a display screen of a user client device, the group-based communication interface defining:**

51. It is my opinion that Cohen discloses this limitation. Cohen discloses a variety of interactive interfaces available to participants in a chat session. *Id.* at FIGS. 3-5. Specifically, Cohen describes how each interface allows participants to engage in group-based communications. *Id.* at [0037], [0005]-[0013].

52. Cohen discloses that these interfaces are flexibly configurable and present formatted content (including buttons, cursors, and tools) on the display screen of a client device. *Id.* at [0037]. The GUI, as illustrated in FIG. 1 (application 117), provides a user with the ability to direct messages to other selected participants in the group chat session. *Id.*

53. Figure 3 illustrates an example interface:



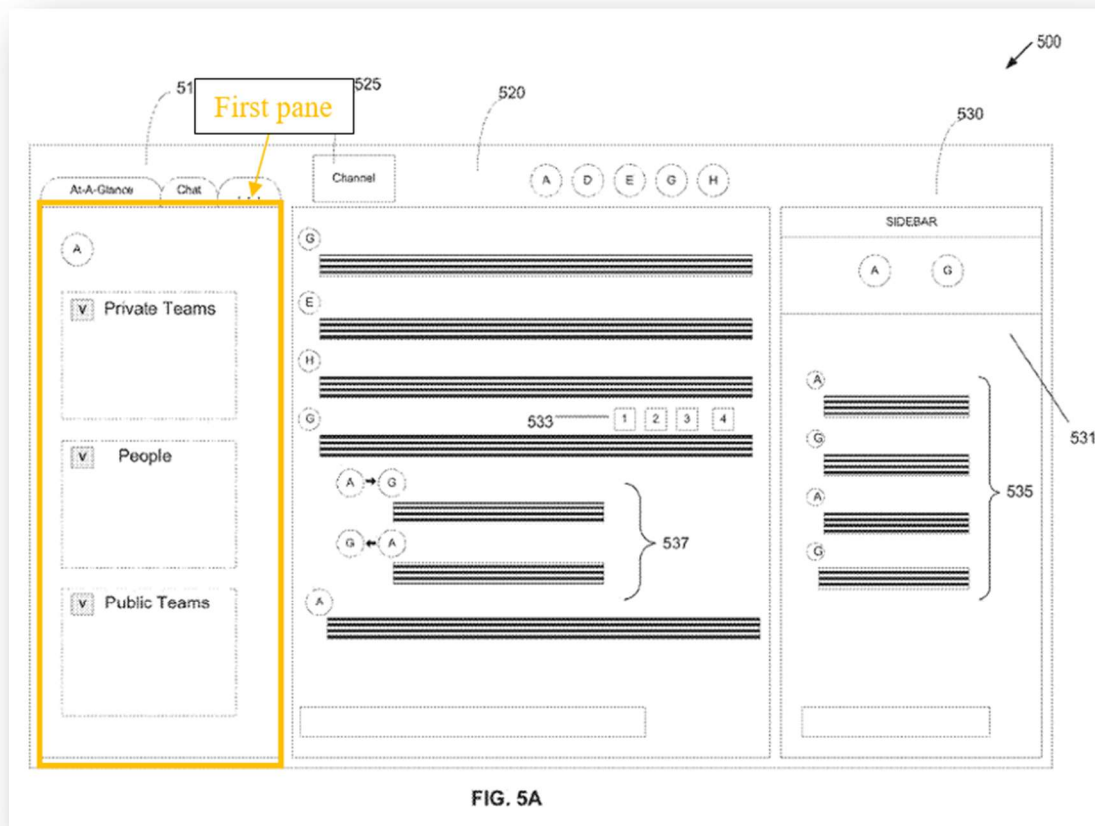
*Id.* at FIG. 3. Thus, Cohen discloses this limitation.

4. **1[c] a first pane configured to display a plurality of channel identifiers, each of said plurality of channel identifiers corresponding to a respective one of a plurality of group-**

**based communication channels, each of such channels having an associated group of members who are users of said system, and**

54. It is my opinion that Cohen discloses this limitation. Cohen discloses a “channel/dialog panel 310” as part of an interface portal that includes several additional panels. *Id.* at [0038]. “The channel/dialog panel 310 displays the different chat session groups 315 that a particular participant 317 has joined.” *Id.* The channel/dialog panel (310, 410, and 510) displays a plurality of channel identifiers, and the channel identifiers each correspond to a plurality of group-based communication channels [317]. *Id.* at [0038], [0071] (stating that the channel/dialog panel of 310, 410, and 510 are all comparable). A PHOSITA would have understood that each channel has an associated group of members who are users of said system.

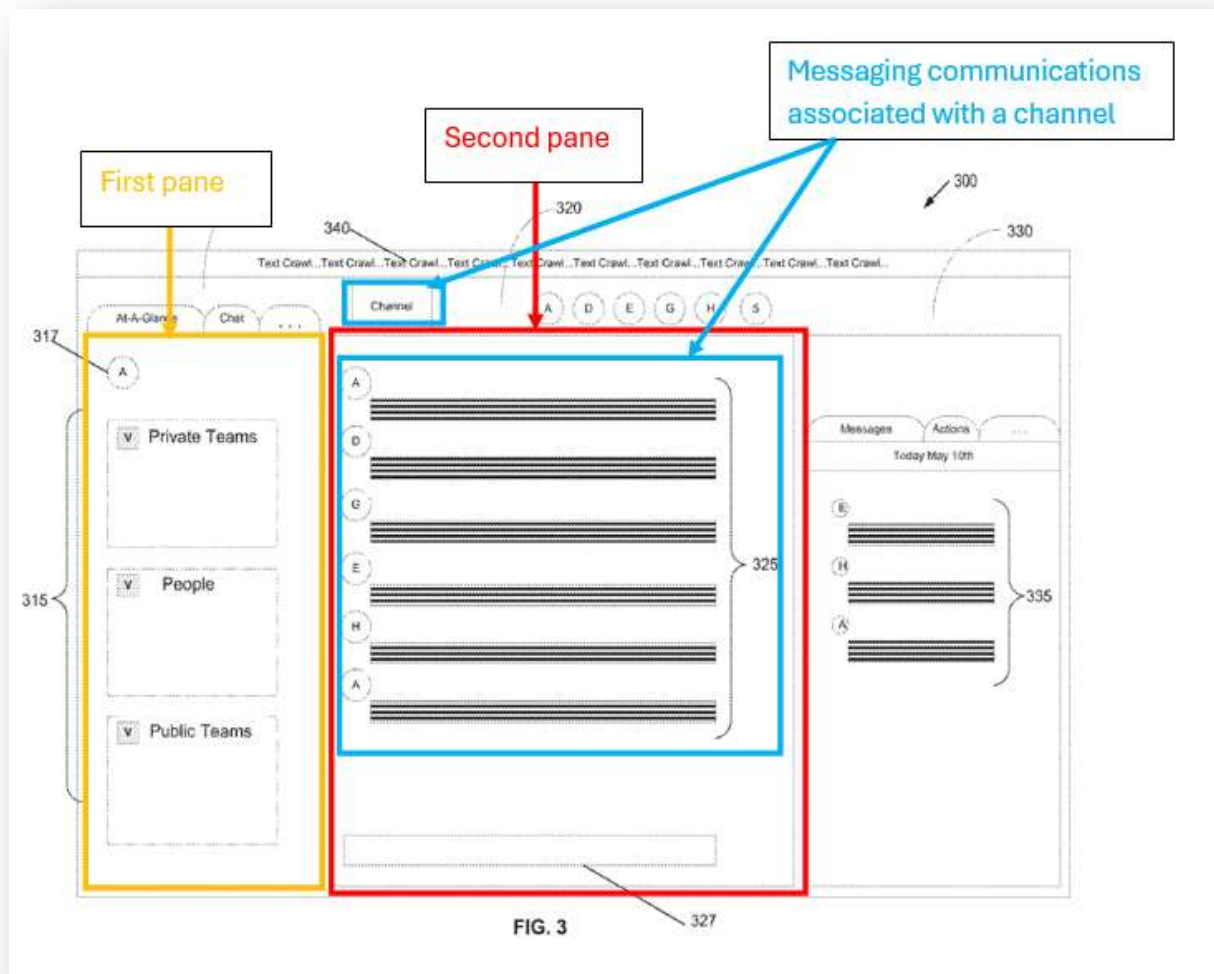
55. Figure 5A depicts an example of this group-based communication interface displayed among a user client device with a first pane configured to display a plurality of channel identifiers [510]:



*Id.* at 5A (annotations highlighting the first pane configured to display a plurality of channel identifiers). Thus, Cohen discloses this limitation.

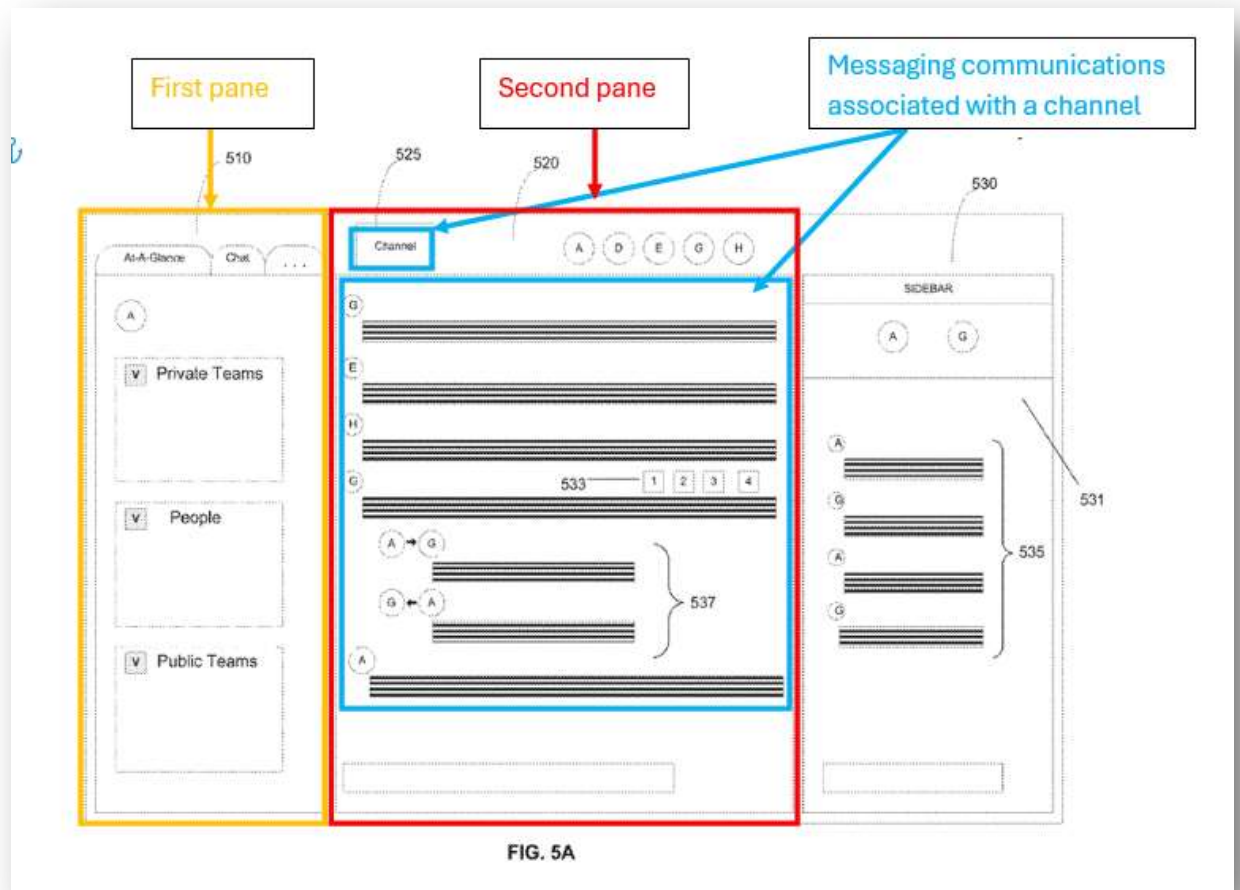
5. **1[d] a second pane configured to display messaging communications associated with a selected one of said plurality of group-based communication channels corresponding to one of said plurality of channel identifiers,**

56. It is my opinion that Cohen discloses this limitation. Cohen discloses a “message window panel 320 [second pane] [that] displays the chat messages 325 exchanged by the participants[,]” (*Id.* at [0038]) as illustrated in Figure 3:



*Id.* at FIG. 3 (annotations added).

57. This is also illustrated in Figure 5A, and Cohen teaches that the messages are correlated to a particular channel (525) (*Id.* at [0071]):



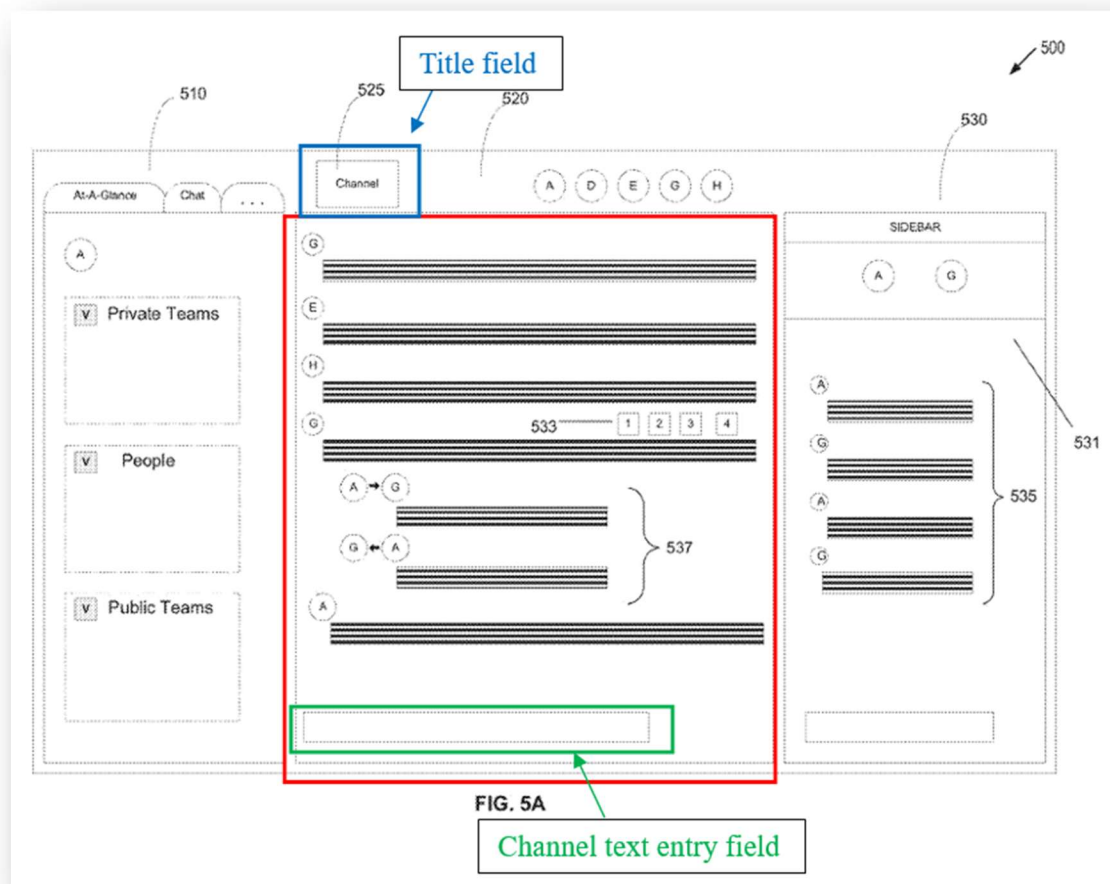
*Id.* at FIG. 5A (annotations added). Thus, Cohen discloses this limitation.

6. 1[e] wherein, associated with said second pane, is a channel text entry field that is user operable to generate communication in said selected one of said plurality of group-based communication channels, and a title field displaying information identifying said selected one of said plurality of group-based communication channels,

58. It is my opinion that Cohen discloses this limitation. Cohen discloses a “message window panel 320 [that] also includes a count of the current participants 323 and **a text entry region 327** that allows the participants to insert and reformat the text (i.e., bold, italics, color), add a link (hypertext link) or file, or

insert an actionable object or bundle communications into a chat session.” *Id.* at [0038] (emphasis added). “Each message that is entered into the text entry region 327 is displayed in the message window panel 320.” *Id.* at [0039].

59. Figure 5A depicts an example of this group-based communication interface displaying a second pane configured to display messaging communications corresponding to one channel along with a title field and channel text entry field:

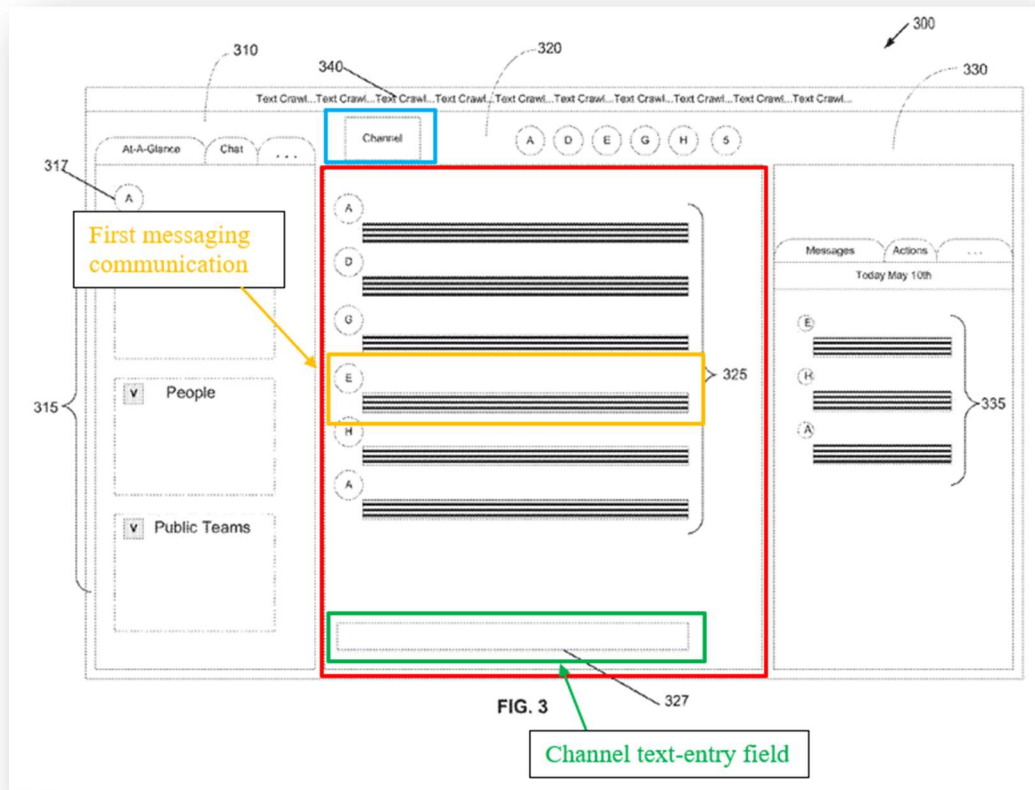


*Id.* at FIG. 5A (annotations added). Thus, Cohen discloses this limitation.

7. **1[f] receive a first messaging communication associated with the selected one of the plurality of group-based communication channels, the selected one of the plurality of group-based communication channels comprising messaging communications, including said first messaging communication, between members of the group associated with said selected one of the plurality of group-based communication channels;**

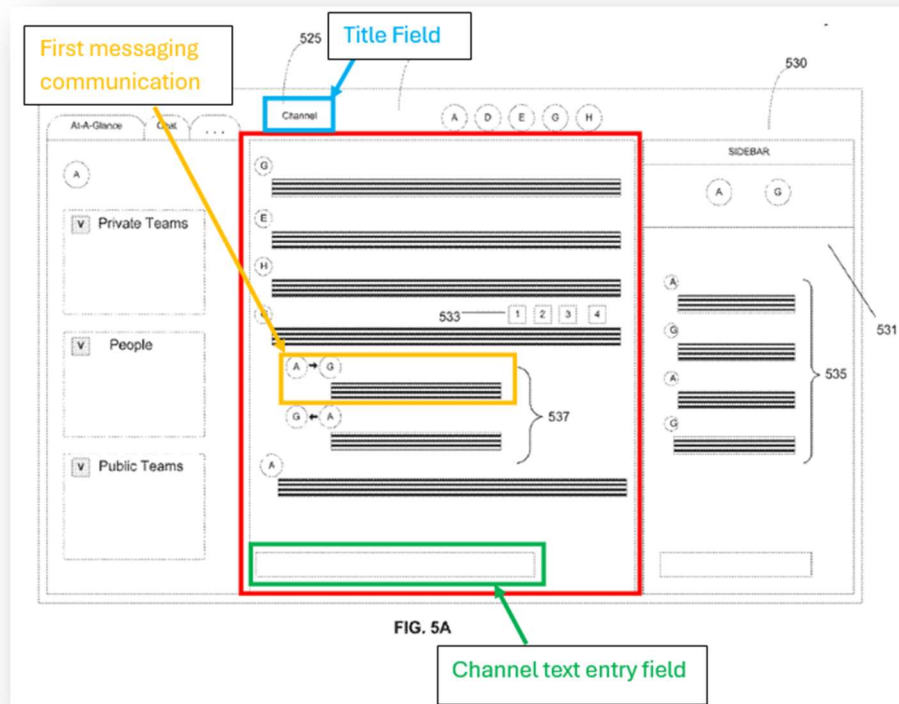
60. It is my opinion that Cohen discloses this limitation. Cohen teaches that a participant can create and send a first messaging communication to the client device of a receiving participant who is actively engaged in the same chat session. *Id.* at [0051]. The “message window panel 320 [then] displays the chat messages 325 exchanged by the participants.” *Id.* at [0038]. Note, 320, 420, and 520 are comparable fields. *Id.* at [0071].

61. Figure 3 illustrates a group-based communication interface associated with a second pane that allows a user to input a message in the channel text-entry field, which is then displayed in the message window panel (second pane):



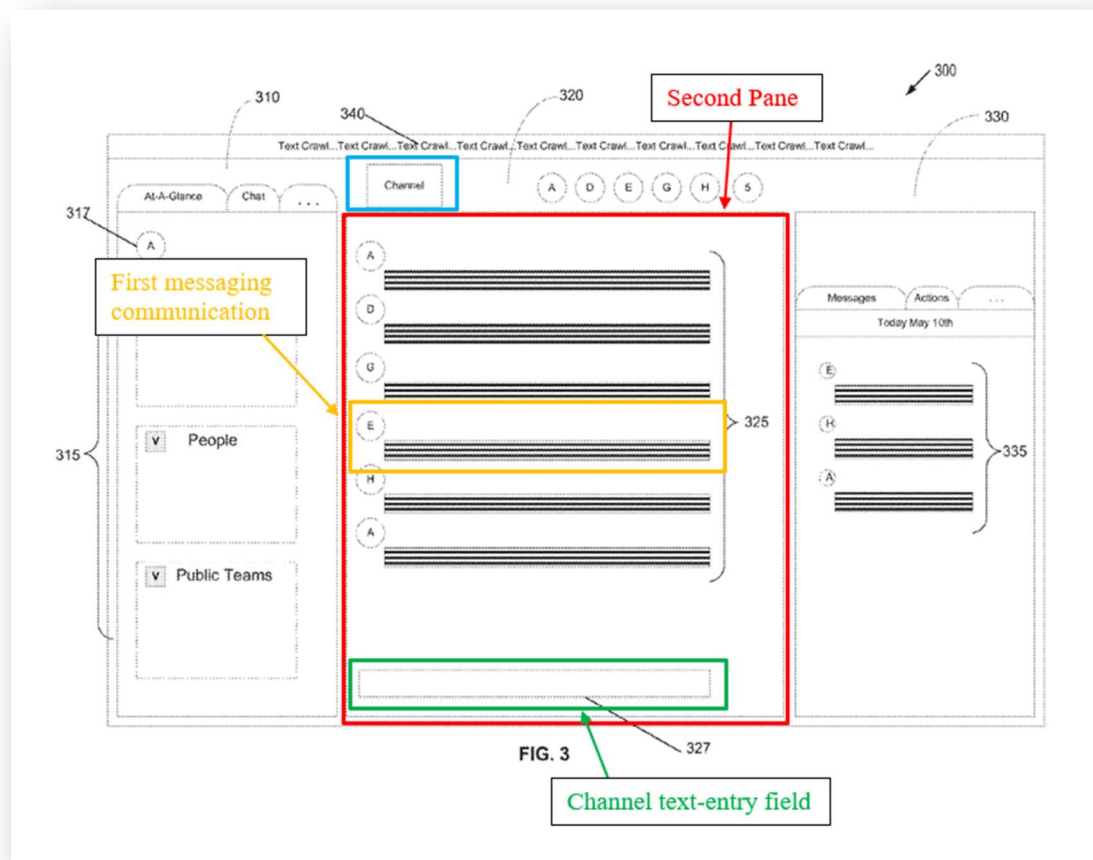
*Id.* at FIG. 3 (annotations added).

62. Figure 5A also illustrates a group-based communication interface with a second pane that receives a first messaging communication, which is then displayed in the message window panel:



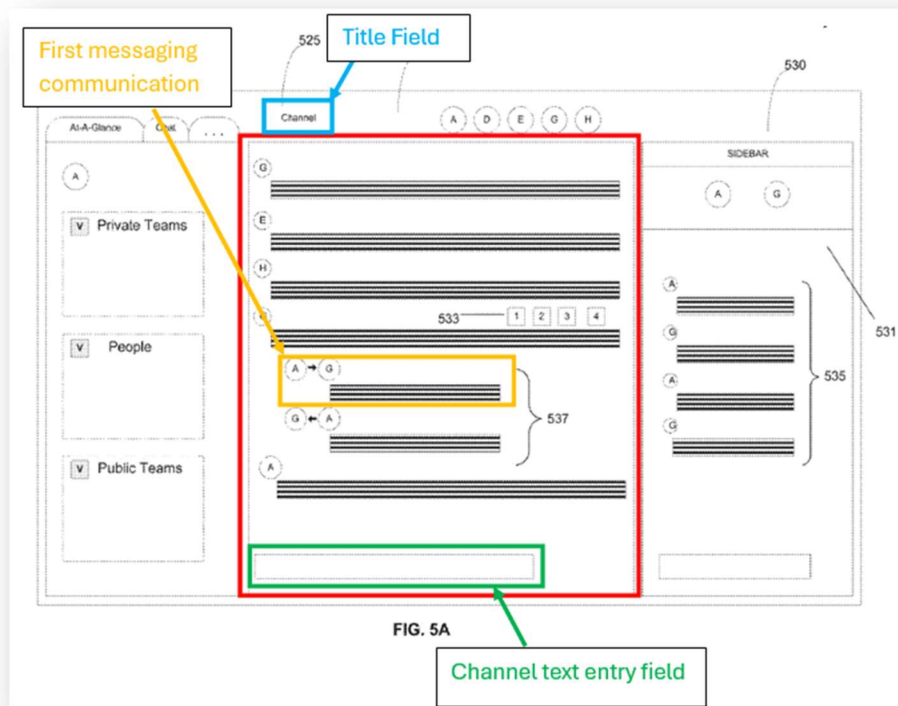
*Id.* at FIG. 5A (annotations added). Moreover, a PHOSITA would understand that any messaging communication displayed within the second pane constitutes a “first messaging communication,” and that the second pane is scrollable, allowing additional, non-displayed messaging communications to potentially be considered the first messaging communication as well. *See id.* at [0074] (when describing FIG 5A, Cohen uses the phrases “in some implementations” and “in one implementation,” indicating that FIG 5A is not intended to be limiting.). Thus, Cohen discloses this limitation.

63. It is my opinion that Cohen discloses this limitation. Figure 3 illustrates a group-based communication interface with a second pane, and that allows a user to input a first messaging communication, which is then displayed in the messaging window (second pane). *See id.* at [0038], [0051], [0071].



*Id.* at FIG. 3 (annotations added).

64. Figure 5A also illustrates a group-based communication interface with a first messaging communication displayed within the second pane:



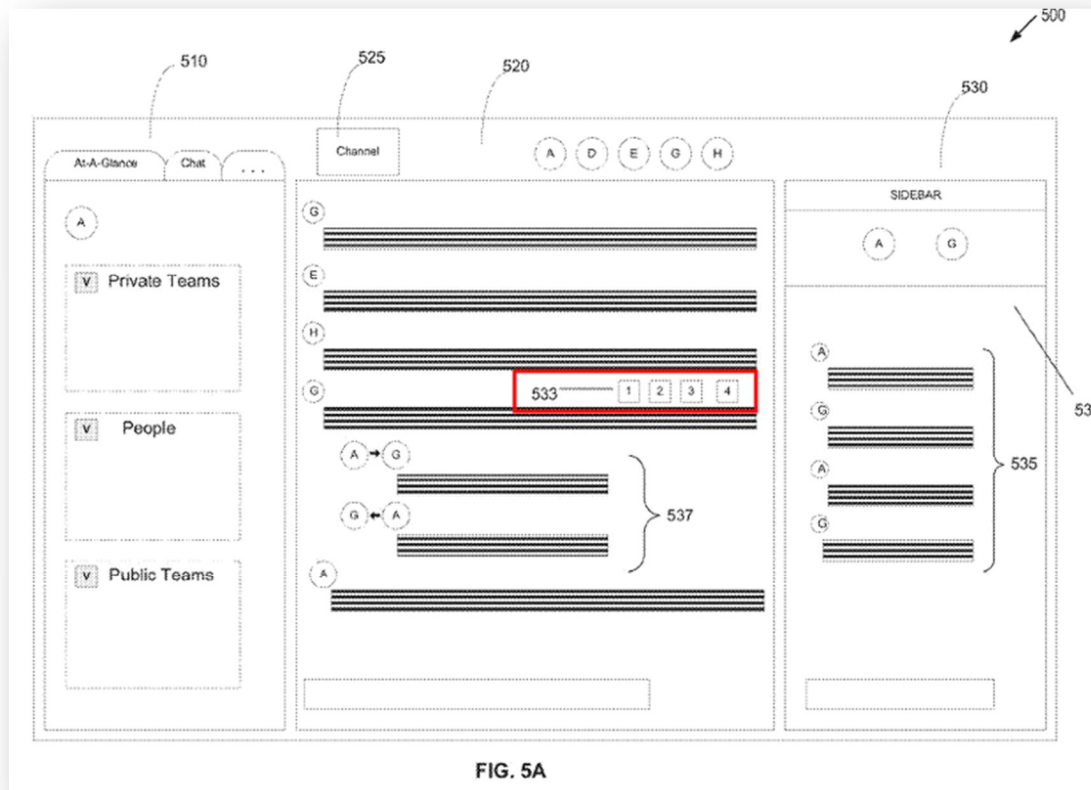
*Id.* at FIG. 5A (annotations added). Thus, Cohen discloses this limitation.

**9. 1[h] display a first user-selectable control associated with said first messaging communication;**

65. It is my opinion that Cohen discloses this limitation. Cohen discloses “techniques for integrating *actionable objects* into an on-line chat communications platform.” *Id.* at [0014] (emphasis added); *Id.* at [0027]. Specifically, “the client device 110 may integrate into a chat session user perceivable actionable objects, such as actionable objects 115, which can be executed by the client device 110 to enhance communications between participants of that session.” *Id.* at [0030]. These actionable objects (i.e., user-selectable controls) may be associated with the messages among the messaging window panel. *Id.* at [0075] (“the first chat

participant may also initiate the sidebar session 531 by activating a control 533 associated with a message from the second chat participant.”); *see also id.* at [0040] (“In one example, the participant taps on a control associated to a particular message in the message window 320 to bring up a palette of color tags.”); *see also id.* at [0075] (“a first chat participant, such as participant A, clicks on and/or hovers over the display name for a second chat participant, such as participant G, in the main window 520, a sidebar session 531 opens.”)

66. Figure 5A illustrates a group-based communication interface with a second pane displaying a first user-selectable control (number 1) associated with a first messaging communication:



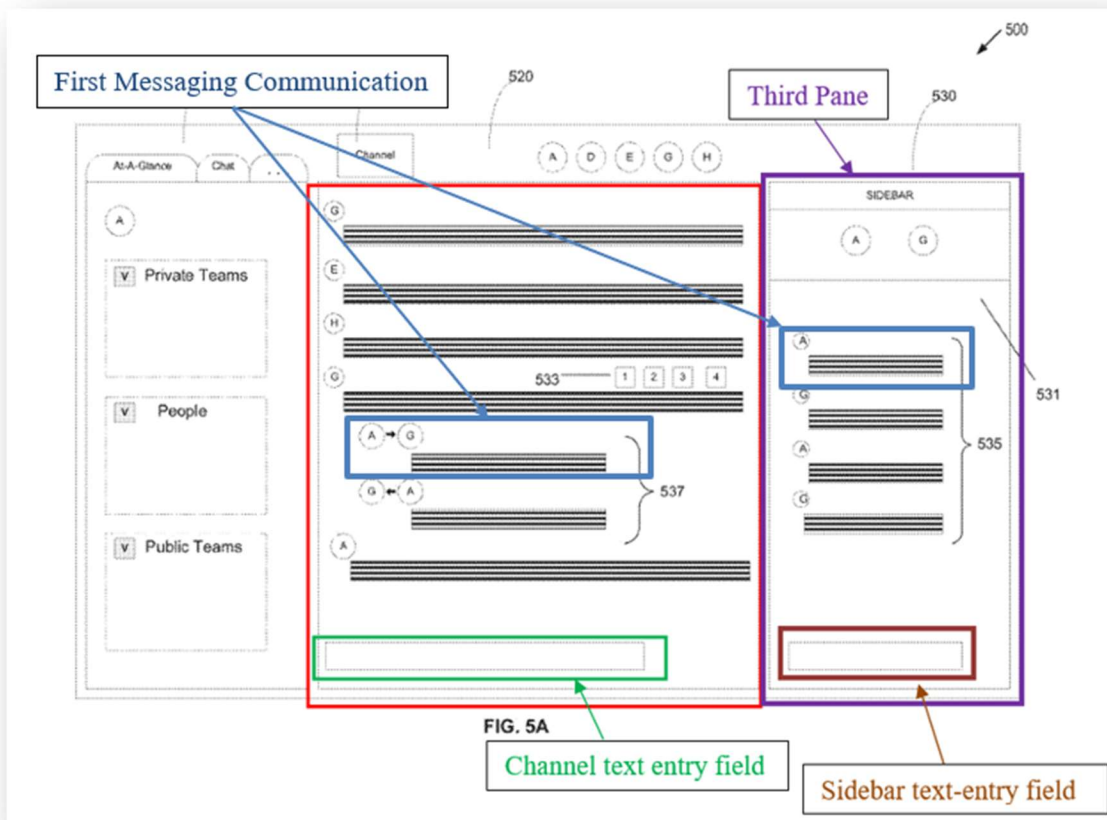
*Id.* at FIG. 5A (annotations added). A PHOSITA would have understood that the controls 533 would be associated with any message within interface 500, as Cohen explicitly teaches the integration of various actionable objects into an online chat communications platform. *Id.* at Abstract; *cf. id.* at FIGS. 5A, 5D (depicting controls 533 among different panes). Thus, Cohen discloses this limitation.

10. **1[i] in response to a user selection of said first user-selectable control, display a third pane, said third pane displaying said first messaging communication and having an associated sidebar text-entry field that is different from**

**said channel text-entry field and operable to receive user input of an additional messaging communication;**

67. It is my opinion that Cohen discloses this limitation. Cohen teaches a “side panel 330 [that] can be adjusted to dynamically display elements regarding various messages or groups of messages 335.” *Id.* at [0038]. “[T]he first chat participant may also *initiate the sidebar session 531 by activating a control 533 associated with a message* from the second chat participant.” *Id.* at [0075] (emphasis added). The sidebar session 531 enables a user to create a “private chat session 535 to enhance the electronic communications between the participants.” *Id.* A user can directly reply to someone in a group chat privately while preserving context from the broader conversation. *Id.* at [0072]. Further, “[t]he sidebar session 531 includes functions available to users of interface portal 500.” *Id.* at [0075].

68. Figure 5A illustrates a group-based communication interface with a third pane displaying a distinct side-bar text entry field operable to receive user input of an additional messaging communication, and includes a first message:

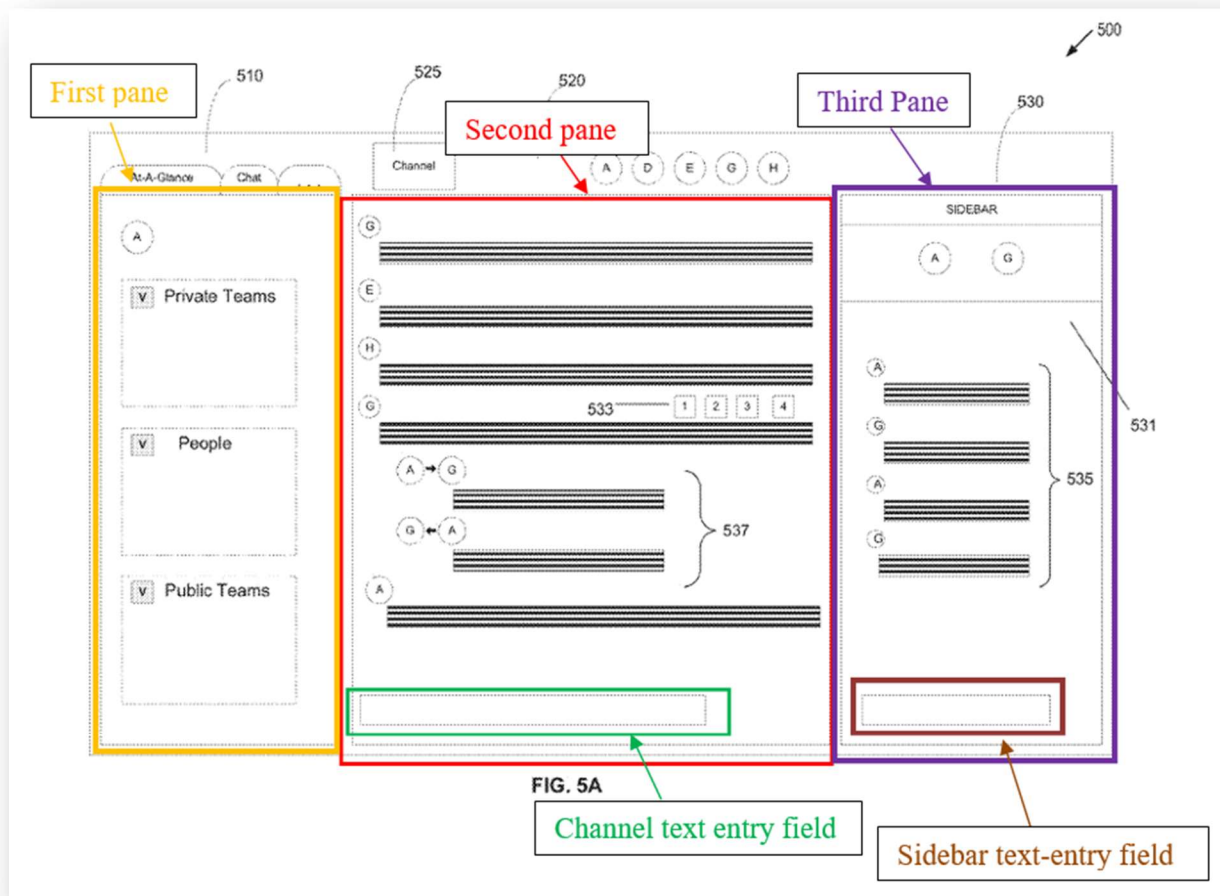


*Id.* at FIG. 5A (annotations added). Cohen discloses that item 537 (within the main window 520) presents a “***private chat session*** 537” between members A and G. *Id.* at [0074] (emphasis added). Cohen also discloses that item 535 is within “sidebar selection 531 that allows two or more members, such as member A and G of a larger group session channel 525 to communicate privately in a ***private chat session*** 535.” *Id.* at [0073] (emphasis added). A PHOSITA would understand that these two representations of the private chat session between members A and G would contain the same messages, and that selecting a message within the private chat session 537 would open the sidebar 531 to allow continuation of the private

message session, by using the sidebar text entry field. Indeed, Cohen discloses exactly this functionality, stating “a first chat participant, such as participant A, clicks on and/or hovers over the display name for a second chat participant, such as participant G, in the main window 520, a sidebar session 531 opens. In some implementations, the first chat participant may also initiate the sidebar session 531 by activating a control 533 associated with a message from the second chat participant. The sidebar session 531 allows the first chat participant to interact directly with the second chat participant outside of the “larger group session channel 525.” *Id.* at [0075].

69. Figure 3 also illustrates an embodiment where a first messaging communication is displayed within both the second and third pane:





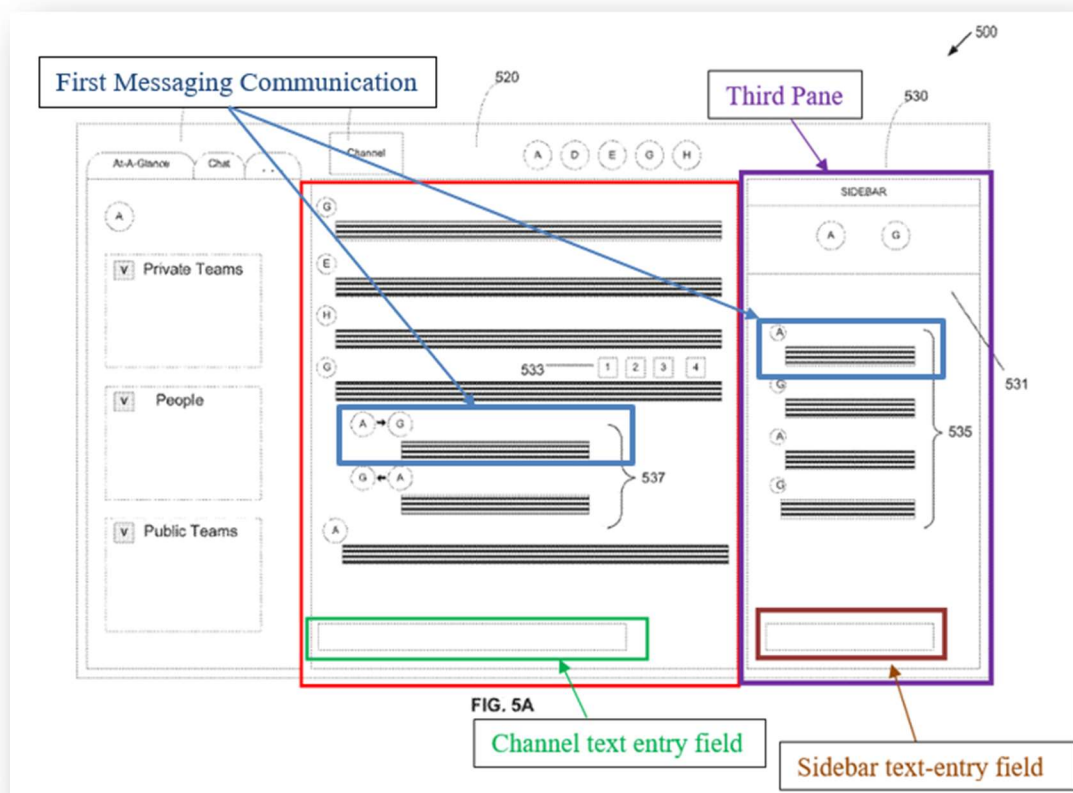
*Id.* at FIG. 5A (annotations added). Thus, Cohen discloses this limitation.

12. 1[k] wherein said first messaging communication is displayed within said third pane and said second pane simultaneously;

71. It is my opinion that Cohen discloses this limitation. Cohen teaches that “the first chat participant may also initiate the sidebar session 531 by activating a control 533 associated with a message from the second chat participant.” *Id.* at [0075]. Cohen also teaches that, “the interface portal 500 may include controls 533 to *integrate some or all of the private chat session 537 into*

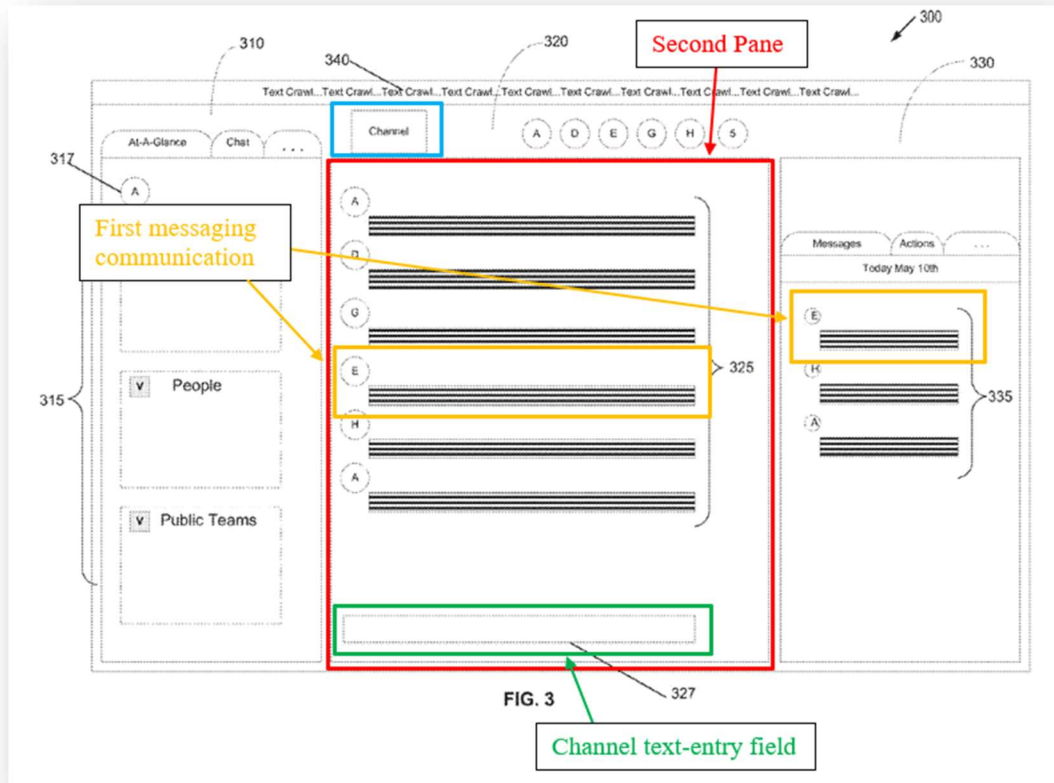
*the larger group session channel 525* for display to other participants.” *Id.* at [0074] (emphasis added); *see also id.* (“In some implementations, the *private chat session 535* in response to a request from the first participant or the second participant may permit a third participant to join *the second chat session that is either currently in or not in the larger group session channel 525.*” (emphasis added)).

72. Figure 5A illustrates an example where a first messaging communication is displayed among the third pane and second pane simultaneously:



*Id.* at FIG. 5A (annotations added).

73. Additionally, Figure 3 also illustrates an embodiment where a first messaging communication is displayed within both the second and third pane simultaneously:



*Id.* at FIG. 3 (annotations added). Thus, Cohen discloses this limitation.

**13. 1[l] receive user input of an additional messaging communication in said sidebar text-entry field;**

74. It is my opinion that Cohen discloses this limitation. Cohen describes a “sidebar session 531” that enables a first chat participant to interact directly with a second chat participant outside of the larger group session channel. *Id.* at [0075]. This sidebar session allows the user to “reply directly to someone in a group chat

that can be kept private from other group members without having to engage the entire group, while retaining context and relativity to the broader conversation.” *Id.* at [0072]. The described sidebar session serves as the claimed “sidebar text-entry field,” where user input for additional messaging communications is received. Further, “[t]he sidebar session 531 includes functions available to users of interface portal 500[,]” which includes a text entry field *Id.* at [0075].

75. Figure 5A illustrates a group-based communication interface with a third pane displaying a distinct side-bar text entry field operable to receive user input of an additional messaging communication:



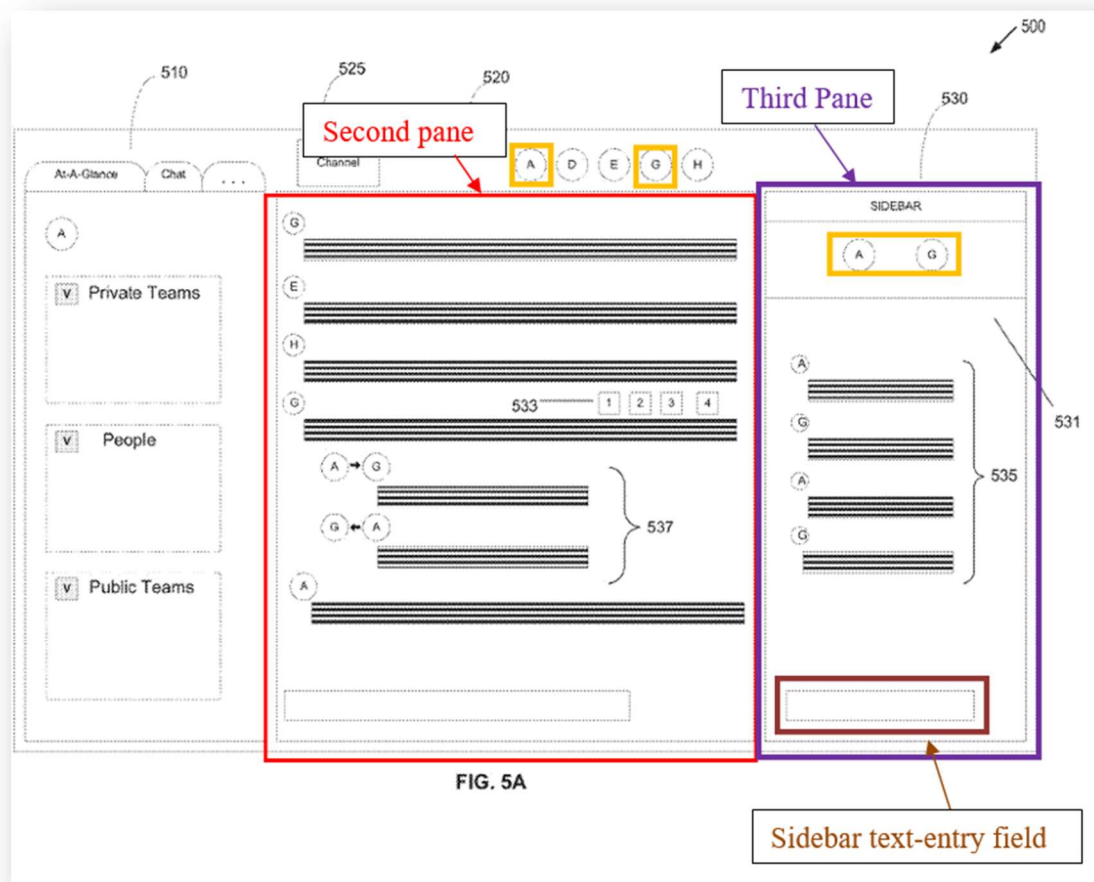
*Id.* at FIG. 5A (annotations added). Thus, Cohen discloses this limitation.

14. 1[m] after receipt of said user input: transmit said additional messaging communication, via a network, to at least one member of the group associated with said selected group-based communication channel and

76. It is my opinion that Cohen discloses this limitation. Cohen describes a system that facilitates asymmetrical chat through channels generally visible to all participants or directed at specific participants within a group. *Id.* at [0072]. This communication is conducted via a “communication network.” *Id.* at [0022]. This means that after receiving user input, the system transmits the additional message

to at least one participant in the group via a network, satisfying the claim's requirement.

77. Figure 5A illustrates a group-based communication interface with a third pane, enabling a user to transmit an additional communication via the sidebar text entry field to at least one member of the group-based communication channel:



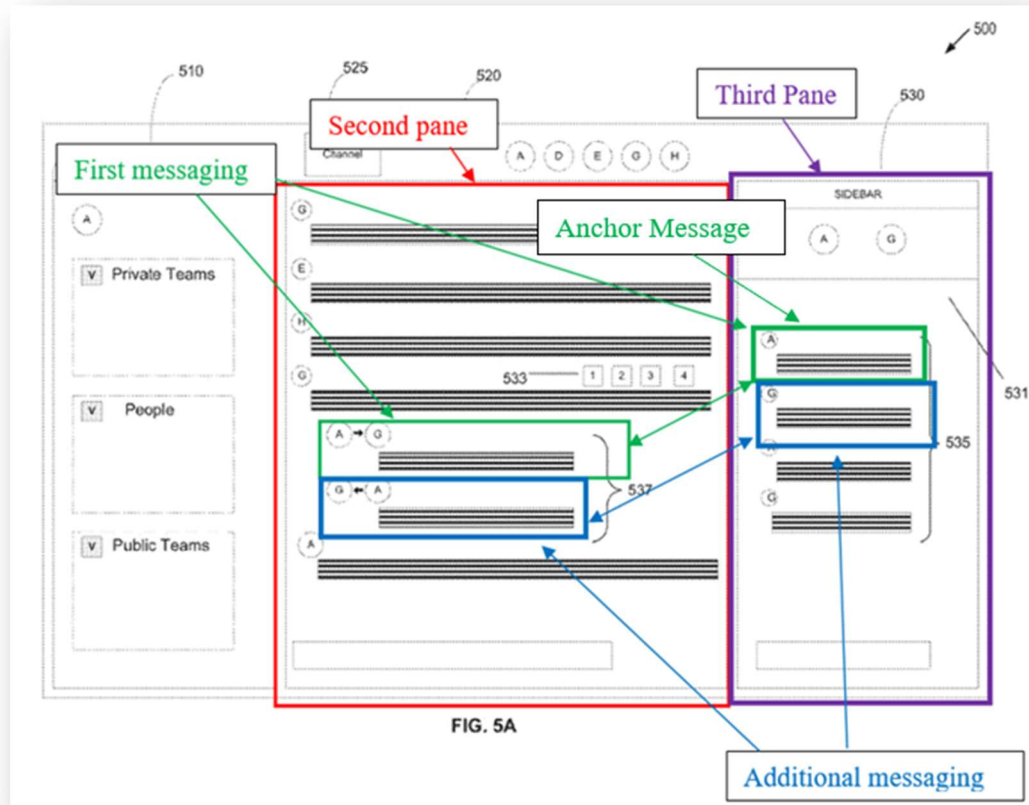
*Id.* at FIG. 5A (annotations highlighting the group members among the group-based channel and the private chat session). Thus, Cohen discloses this limitation.

15. **1[n] display, in said third pane, a first subsidiary communication thread having an anchor message, said thread comprising said first messaging communication together with said additional messaging communication, wherein said first messaging communication is the anchor message of said first subsidiary communication thread;**

78. It is my opinion that Cohen discloses this limitation. Cohen teaches that “the first chat participant may also initiate the sidebar session 531 by activating a control 533 *associated with a message* from the second chat participant.” *Id.* at [0075] (emphasis added). Cohen also teaches that, “the interface portal 500 may include controls 533 to *integrate some or all of the private chat session 537 into the larger group session channel 525* for display to other participants.” *Id.* at [0074] (emphasis added); *see also id.* (“In some implementations, the *private chat session 535* in response to a request from the first participant or the second participant may permit a third participant to join *the second chat session that is either currently in or not in the larger group session channel 525.*” (emphasis added)). A PHOSITA would have understood that the associated message (i.e., first messaging communication) would be displayed as the anchor message among the third pane once a sidebar session 531 (i.e., subsidiary communication thread) was invoked.

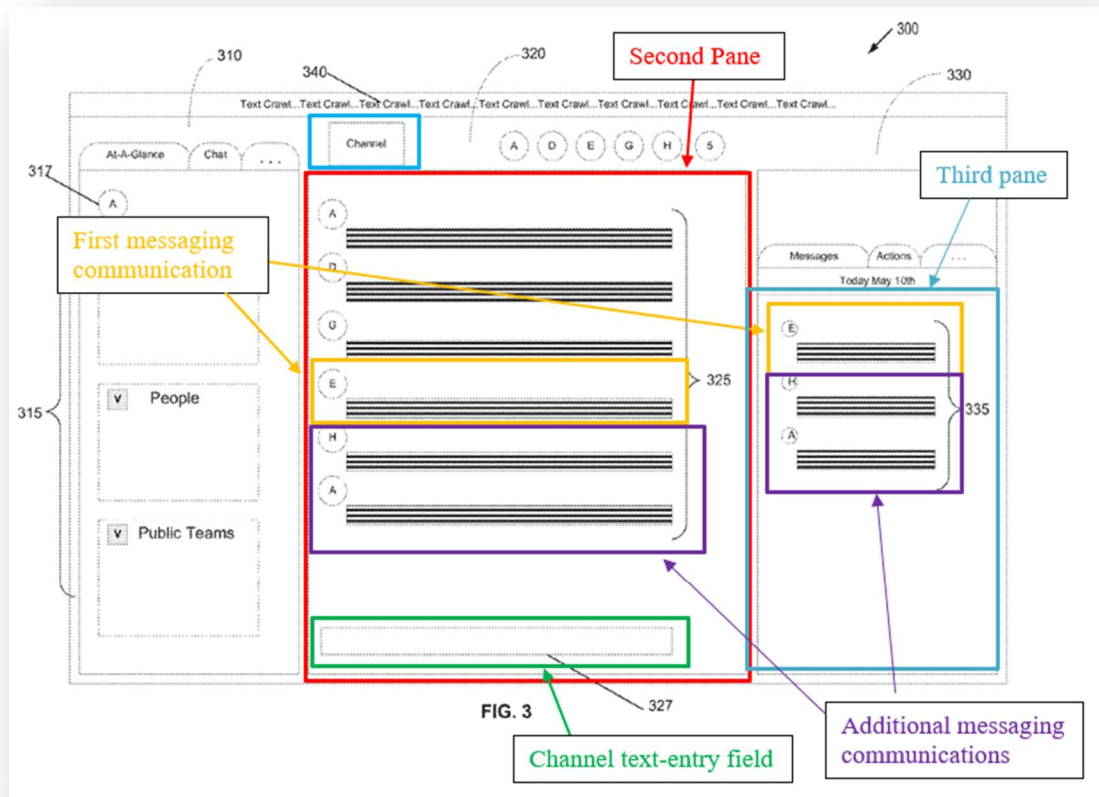
79. Figure 5A illustrates an example where a first messaging communication is displayed in both the third and second panes, with the first

message serving as an anchor message within the subsidiary communication thread:  
thread:



*Id.* at FIG. 5A (annotations added).

80. Figure 3 also illustrates a subsidiary communication thread having an anchor message, that is the first subsidiary message, and where the subsidiary thread comprises the first messaging communication together with said additional messaging communication:



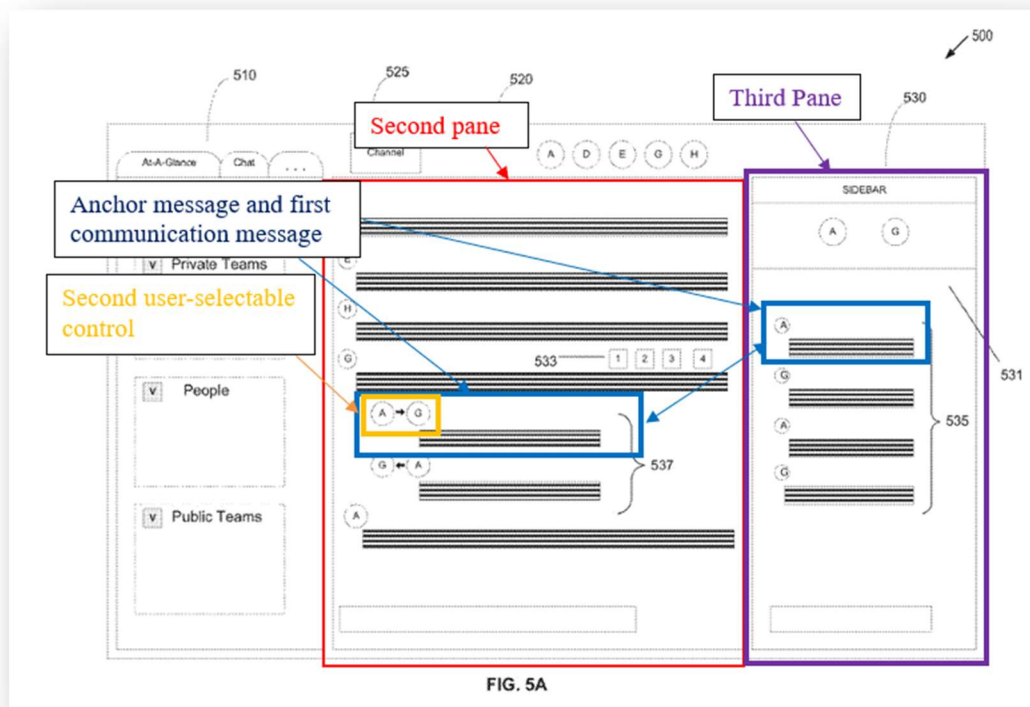
*Id.* at FIG. 3 (annotations added). Thus, Cohen discloses this limitation.

16. 1[o] display a second user-selectable control associated with said first messaging communication in said second pane, said second user-selectable control being associated with an indication that said first messaging communication is an anchor message of a subsidiary communication thread, and being configured to:

81. It is my opinion that Cohen discloses this limitation. Cohen discloses “techniques for integrating *actionable objects* into an on-line chat communications platform.” *Id.* at [0014] (emphasis added); *Id.* at [0027]. Cohen teaches an actionable object where a first chat participant may click on and/or hover over the

display name for a second chat participant in the main window 520 to open a sidebar session 531 (i.e., a subsidiary communication thread). *See id.* at [0075].

82. Figure 5A illustrates a group-based communication interface with a second pane displaying a second user-selectable control (A→G), associated with an indication that said first messaging communication is an anchor message of a subsidiary communication thread because the arrow points from member A and because it is displayed in proximity to the top-most message, the first messaging communication within the private session 537:



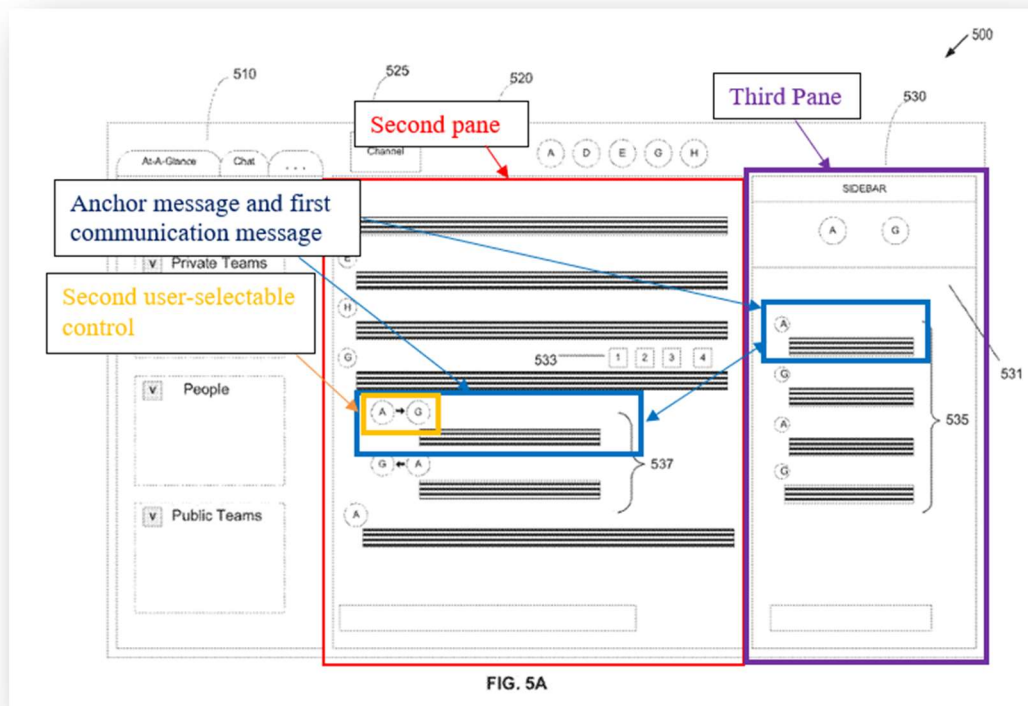
*Id.* at FIG. 5A (annotations added).

83. Figure 5A also illustrates an example where a first messaging communication may be displayed among the third pane and second pane simultaneously. A PHOSITA would have understood that the controls 533 could be associated with any message within interface 500, as Cohen explicitly teaches the integration of various actionable objects into an online chat communications platform. *Id.* at Abstract; *cf., id.* at FIGS. 5A, 5D (depicting controls 533 among different panes). Thus, Cohen discloses this limitation.

**17. 1[p] in response to a user selection of said second user selectable control, cause at least a portion of said first subsidiary communication thread containing said first messaging communication to be displayed in said third pane.**

84. It is my opinion that Cohen discloses this limitation. Cohen teaches an actionable object where a first chat participant may click on and/or hover over the display name for a second chat participant in the main widow 520 to open a sidebar session 531 (i.e., a subsidiary communication thread). *See id.* at [0075].

85. Figure 5A illustrates an example where a first messaging communication may be displayed among the third pane and second pane simultaneously on account of a user selecting a control (A→G) among the second pane that is associated with the first messaging communication:



*Id.* at FIG. 5A (annotations added).

86. Thus, Cohen discloses this limitation.

## B. Dependent Claim 2

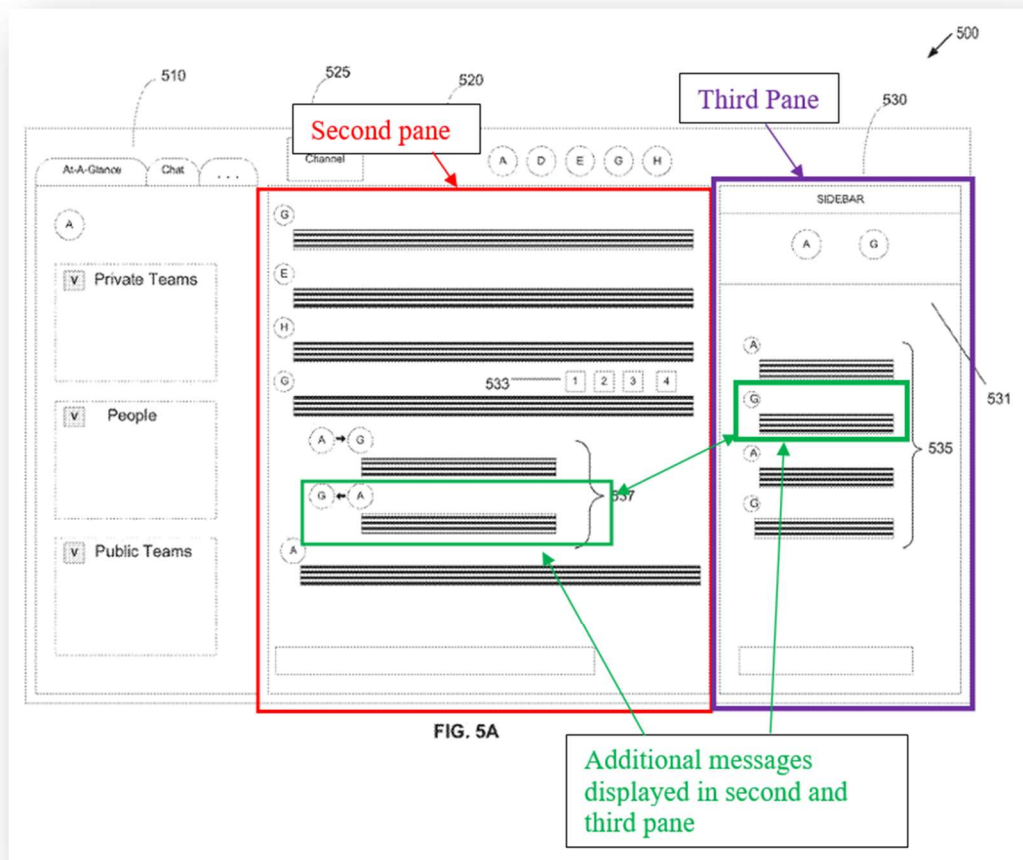
**The apparatus of claim 1, further comprising instructions for causing the apparatus to display said additional messaging communication in said second pane while said additional messaging communication is being displayed in said third pane.**

87. It is my opinion that Cohen discloses this claim. First, Cohen discloses the apparatus of claim 1 limitation, as described above, which is incorporated by reference. *See* Section X.A, *supra*. Second, Cohen teaches that “the first chat participant may also initiate the sidebar session 531 by activating a

control 533 associated with a message from the second chat participant.” Exh-1005 at [0075].

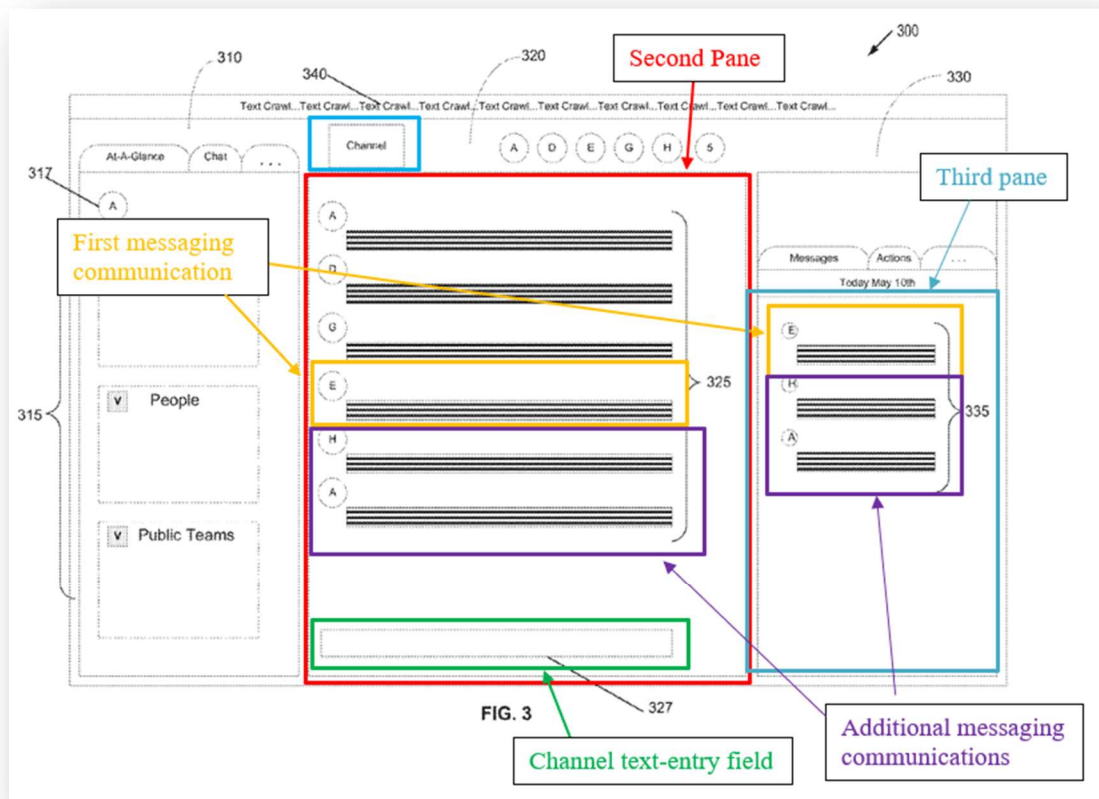
88. Cohen also teaches that, in some embodiments, the private chat session 535 is hidden from other participants in the larger group session. *Id.* at [0074]. In other cases, “the interface portal 500 may include controls 533 to ***integrate some or all of the private chat session 537 into the larger group session channel 525*** for display to other participants.” *Id.* at [0074] (emphasis added); *see also id.* (“In some implementations, the ***private chat session 535*** in response to a request from the first participant or the second participant may permit a third participant to join ***the second chat session that is either currently in or not in the larger group session channel 525.***” (emphasis added)).

89. Figure 5A illustrates an example where an additional communication may be displayed among the second pane and third pane simultaneously:



*Id.* at FIG. 5A (annotations added).

90. Figure 3 also illustrates displaying an additional messaging communication in the second pane while the additional messaging communication is being displayed in said third pane:



*Id.* at FIG. 3 (annotations added).

91. Cohen also teaches a “computer system 900 within which a set of *instructions*, for causing the machine to perform any one or more of the methodologies discussed herein, may be executed.” *Id.* at [0096] (emphasis added), FIG. 9. Thus, Cohen discloses this claim.

### C. Dependent Claim 3

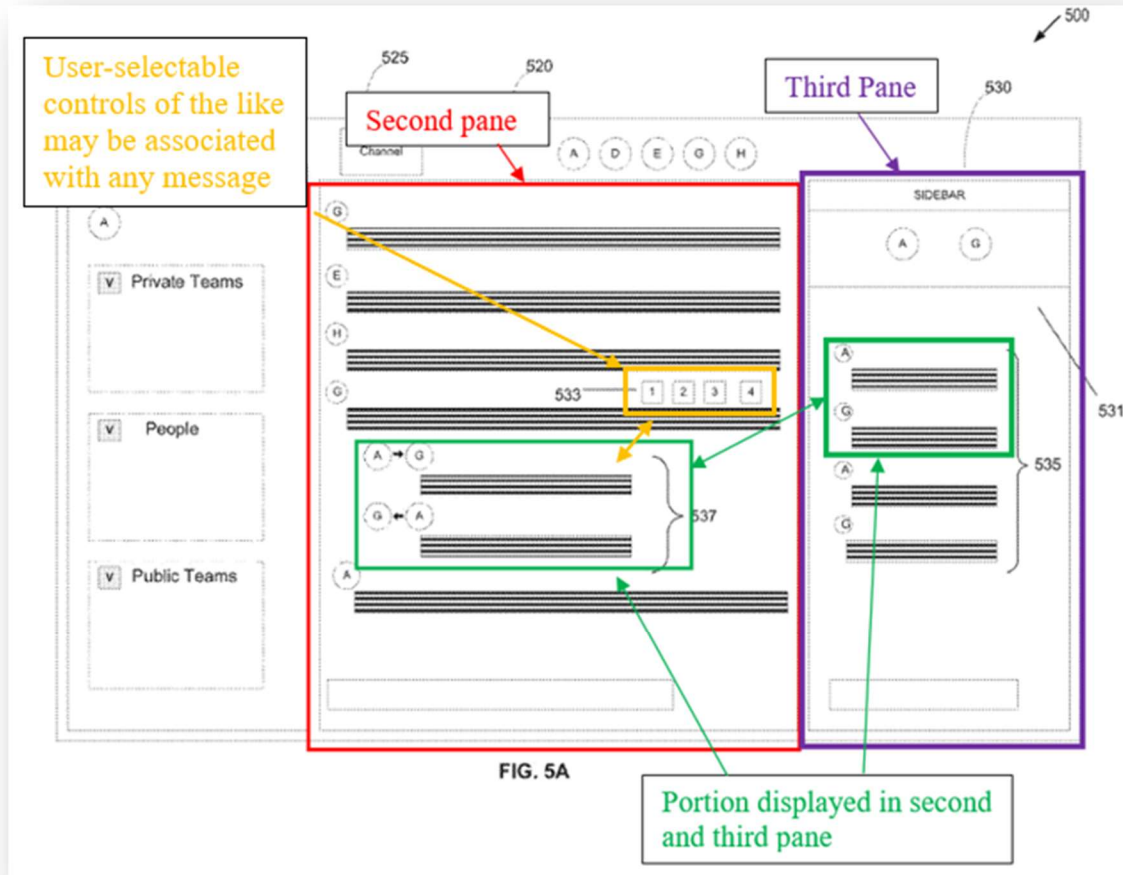
1. **3[pre] The apparatus of claim 2, wherein displaying said additional messaging communication in said second pane comprises providing a third user-selectable control associated with said additional messaging communication in**

**said second pane, wherein said third user-selectable control is configured to:**

92. It is my opinion that Cohen discloses this claim. First, Cohen discloses the apparatus of claim 2, as described above, which is incorporated by reference. *See* Section X.B, *supra*. Second, Cohen discloses “techniques for integrating actionable objects into an on-line chat communications platform.” Exh-1005 at [0014] (emphasis added); *Id.* at [0027]. Specifically, “the client device 110 may integrate into a chat session user perceivable actionable objects, such as actionable objects 115, which can be executed by the client device 110 to enhance communications between participants of that session.” *Id.* at [0030]. These actionable objects (i.e., controls) may be associated with the messages among the messaging window panel. *Id.* at [0075] (“the first chat participant may also initiate the sidebar session 531 by activating a control 533 associated with a message from the second chat participant.”); *see also id.* at [0040] (“In one example, the participant taps on a control associated to a particular message in the message window 320 to bring up a palette of color tags.”). A PHOSITA would have understood that a control 533 (i.e., a third user-selectable control) may be associated with an additional messaging communication among the second pane.

93. Figure 5A illustrates an example where a first messaging communication may be displayed among the third pane and second pane

simultaneously on account of a user selecting a control (number 3) associated with a message:



*Id.* at FIG. 5A (annotations added). A PHOSITA would have understood that the controls 533 could be associated with any message within interface 500, as Cohen explicitly teaches the integration of various actionable objects into an online chat communications platform. *Id.* at Abstract; *cf.*, FIGS. 5A, 5D (depicting controls 533 among different panes). Thus, Cohen discloses this limitation.

2. 3[a] in response to user selection of said third user-selectable control, cause at least a portion of said first

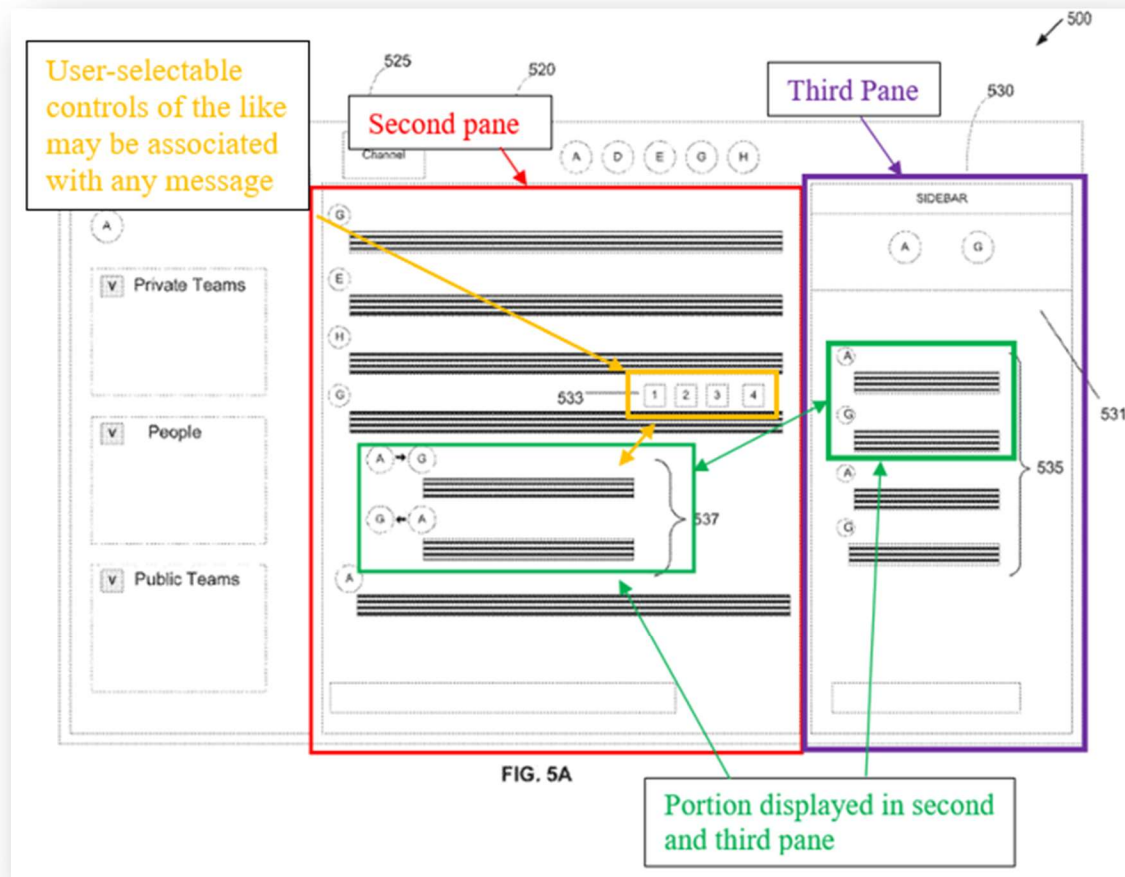
**subsidiary communication thread containing said additional messaging communication to be displayed in a third pane.**

94. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.B.1, *supra*. Cohen teaches that “[t]he first chat participant may also ***initiate the sidebar session 531 by activating a control 533 associated with a message*** from the second chat participant.” Exh-1005 at [0075] (emphasis added). The sidebar session 531 allows a user to create a private chat session 535, enabling direct replies to someone in a group chat that remain private from other members while retaining context and relevance to the broader conversation. *Id.* at [0072]. Further, “[t]he sidebar session 531 includes functions available to users of interface portal 500.” *Id.* at [0075].

95. Cohen also teaches that, “the interface portal 500 may include controls 533 to ***integrate some or all of the private chat session 537 into the larger group session channel 525*** for display to other participants.” *Id.* at [0074] (emphasis added); *see also id.* (“In some implementations, the ***private chat session 535*** in response to a request from the first participant or the second participant may permit a third participant to join ***the second chat session that is either currently in or not in the larger group session channel 525.***” (emphasis added)). A PHOSITA would have understood that a user may select a control 533 (i.e., a third user-selectable control) to cause a portion of the first subsidiary communication thread containing the additional messaging communication to be displayed in the third

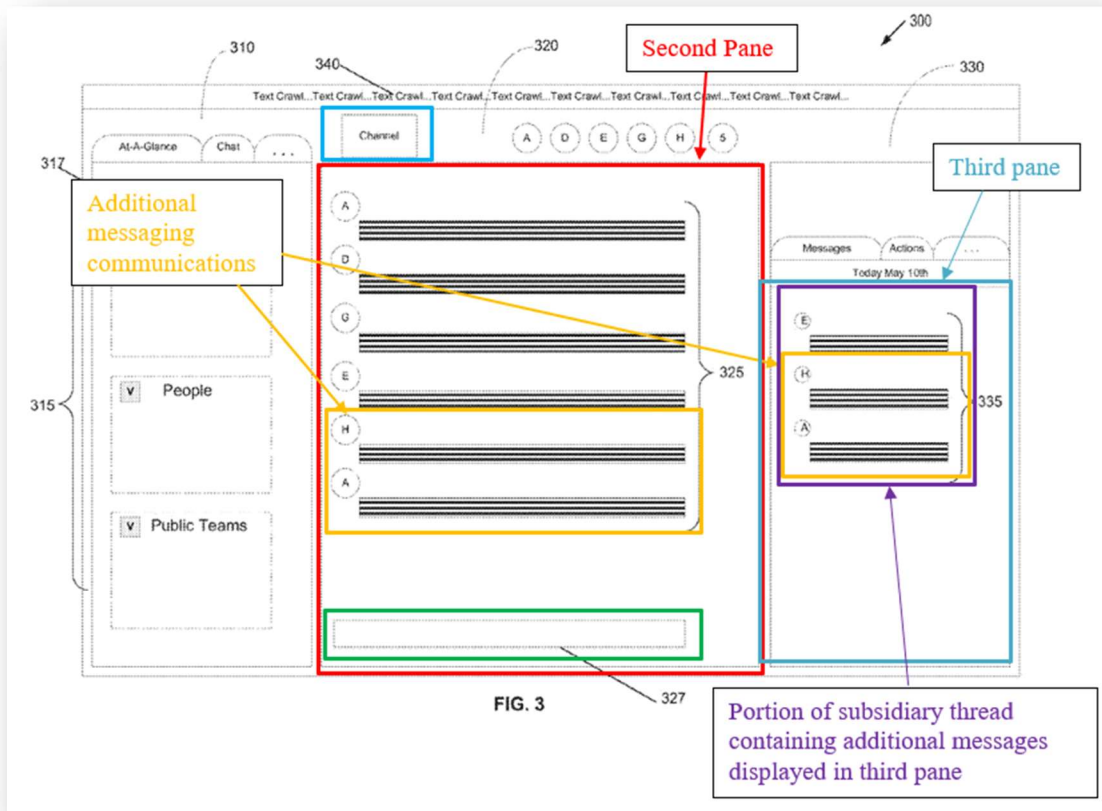
pane. Cohen teaches that “[i]n some implementations, the private chat session 535 in response to a request from the first participant or the second participant may permit a third participant to join the second chat session that is either currently in or not in the larger group session channel 525.” *Id.* at [0074]. For example, a user would make such a request upon a selection of the third-user selectable control (such as number 3 within control 533).

96. Figure 5A illustrates an example where a portion of the first subsidiary communication thread containing the additional messaging communication to be displayed in the third pane:



*Id.* at FIG. 5A (annotations added).

97. Figure 3 also illustrates an example interface where a portion of the first subsidiary communication thread containing the additional messaging communication is displayed in a third pane:



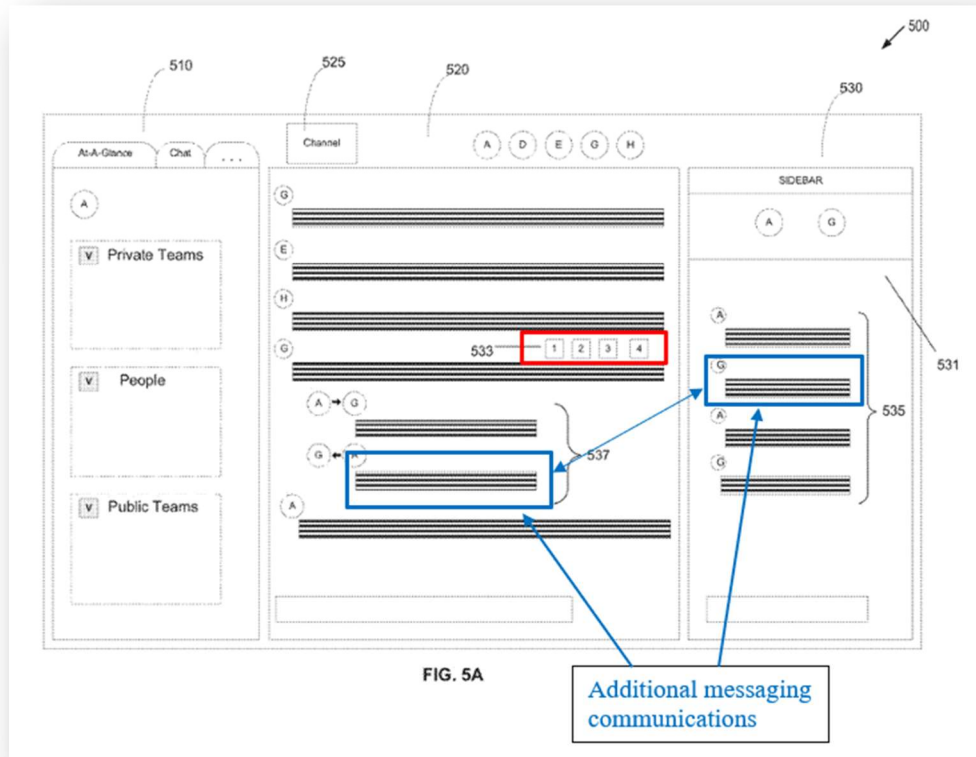
*Id.* at FIG. 3 (annotations added). Thus, Cohen discloses this limitation.

#### D. Dependent Claim 4

**The apparatus of claim 3, wherein providing said third user-selectable control comprises displaying said third user-selectable control proximate to said additional messaging communication.**

98. It is my opinion that Cohen discloses this claim. First, Cohen discloses the apparatus of claim 3 limitation, as described above, which is incorporated by reference. *See* Section X.C, *supra*. Second, Figure 5A illustrates a group-based communication interface with a second pane displaying a third user-

selectable control (number 3) that is proximate to an additional messaging communication:



Exh-1005 at FIG. 5A (annotations added). These actionable objects 553 (i.e., user-selectable controls) may be associated with *any* of the messages among the messaging window panel. *Id.* at [0075] (emphasis added). A PHOSITA would have also understood that the controls 533 could be associated with any message within interface 500, as Cohen explicitly teaches the integration of various actionable objects into an online chat communications platform, rendering the controls 533 to be proximate to the additional messaging communication. *Id.* at

Abstract; *cf.*, FIGS. 5A, 5D (depicting controls 533 among different panes). Thus, Cohen discloses this claim.

#### **E. Dependent Claim 5**

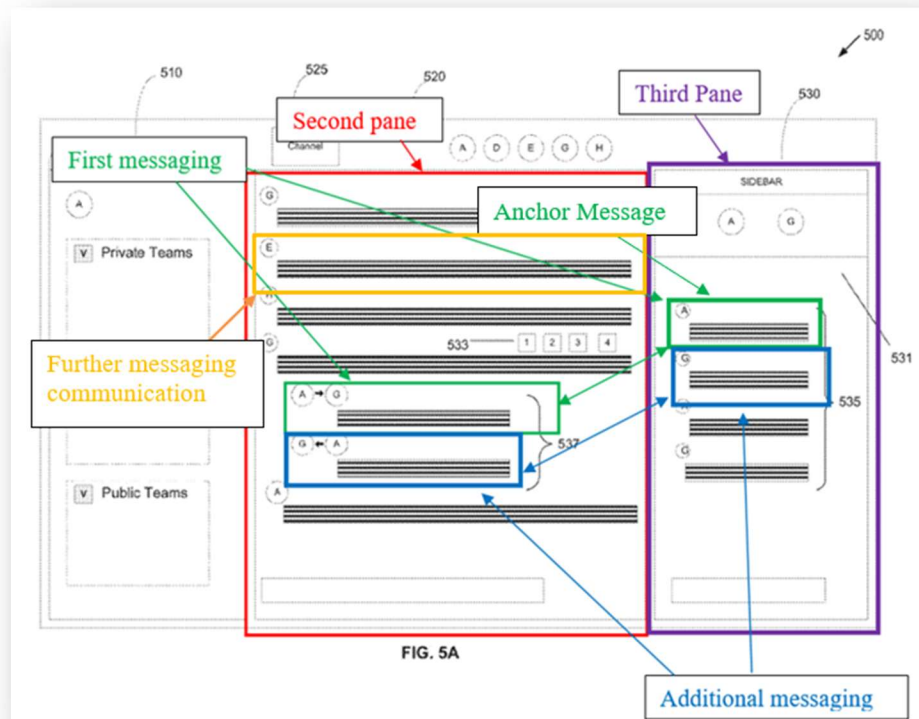
**The apparatus of claim 2, wherein further messaging communications other than said first messaging communication and said additional messaging communications are also displayed in said second pane, and wherein displaying said additional messaging communication comprises displaying said additional messaging communication in the second pane in chronological order relative to said further messaging communications that are displayed in the second pane.**

99. It is my opinion that Cohen discloses this claim. First, Cohen discloses the apparatus of claim 2 limitation, as described above, which is incorporated by reference. *See* Section X.B, *supra*. Second, Cohen discloses the capable of storing “state information 275 [which] may include . . . an order in which chat messages are received as well as other relevant information.” Exh-1005 at [0036]. This suggests that Cohen’s system inherently supports the chronological display of messages in a messaging interface, maintaining the order of received communications, including the first and additional messaging communications.

100. Cohen also teaches that, “the interface portal 500 may include controls 533 to *integrate of some or all of the private chat session 537 into the larger group session channel 525* for display to other participants.” *Id.* at [0074] (emphasis added); *see also id.* (“In some implementations, the *private chat session 535* in response to a request from the first participant or the second participant may

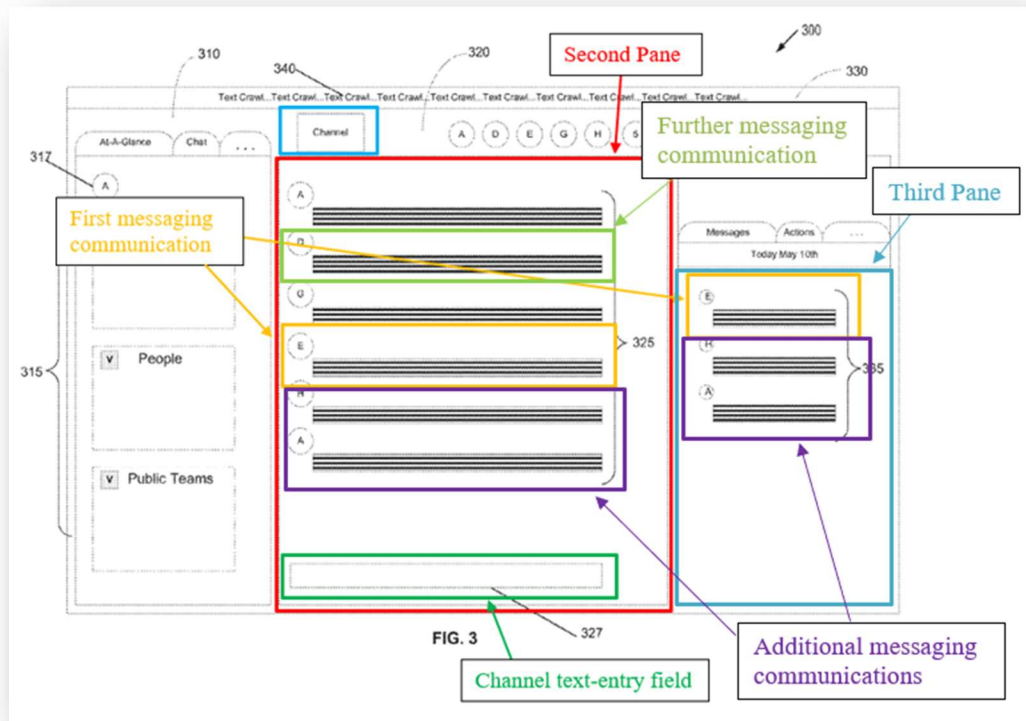
permit a third participant to join *the second chat session that is either currently in or not in the larger group session channel 525.*” (emphasis added)).

101. Figure 5A illustrates further messaging communication, including the first and additional messaging communications, displayed in chronological order within the second pane:



*Id.* at 5A (annotations added).

102. Figure 3 also illustrates a first messaging communication, additional messaging communication, and further messaging communication, all within the second pane and displayed in chronological order:



*Id.* at FIG. 3 (annotations added).

103. A PHOSITA would understand that Cohen's system, which tracks the order of received messages and allows the integration of private chat sessions into the group chat interface, inherently supports the chronological display of all communications, including first and additional messaging communications, within the second pane. Cohen's ability to integrate messages and display them in the order they were received further supports the claimed functionality of displaying additional messaging communications in chronological sequence relative to other messages. Thus, Cohen discloses this claim.

## F. Dependent Claim 6

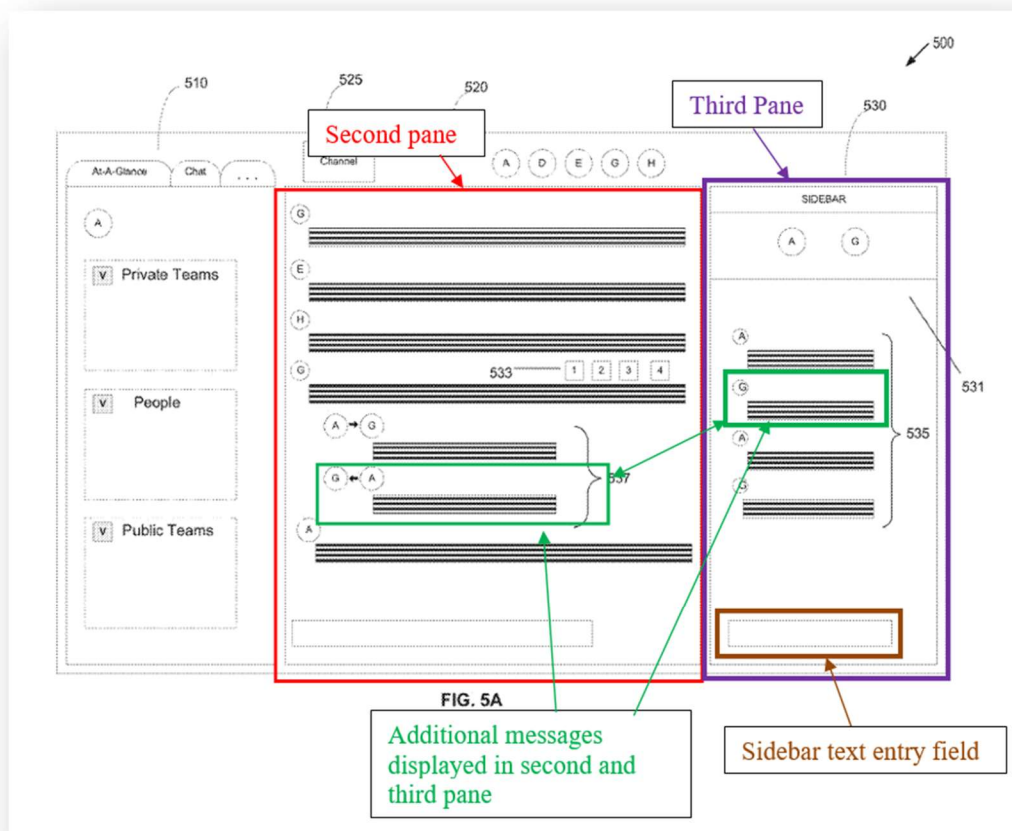
**The apparatus of claim 3, wherein causing at least a portion of said first subsidiary communication thread containing said additional messaging communication to be displayed in said third pane comprises displaying said sidebar text-entry field associated with said third pane that is operable to receive said additional messaging communication.**

104. It is my opinion that Cohen discloses this claim. First, Cohen discloses the apparatus of claim 3 limitation, as described above, which is incorporated by reference. *See* Section X.C, *supra*. Second, Cohen teaches that “[t]he first chat participant may also *initiate the sidebar session 531 by activating a control 533 associated with a message* from the second chat participant.” Exh-1005 at [0075] (emphasis added). This sidebar session is capable of displaying the subsidiary communication thread and is operable to receive additional messaging communications, allowing users to “reply directly to someone in a group chat that can be kept private from other group members without engaging the entire group, while retaining context and relevance to the broader conversation.” *Id.* at [0072]. Further, “[t]he sidebar session 531 includes functions available to users of interface portal 500[,]” which includes a sidebar text-entry field operable to receive additional messaging communications. *Id.* at [0075].

105. Cohen also teaches that, “the interface portal 500 may include controls 533 to *integrate of some or all of the private chat session 537 into the larger group session channel 525* for display to other participants.” *Id.* at [0074]

(emphasis added); *see also id.* (“In some implementations, the *private chat session* 535 in response to a request from the first participant or the second participant may permit a third participant to join *the second chat session that is either currently in or not in the larger group session channel 525.*” (emphasis added)).

106. Figure 5A illustrates an example where a portion of the third pane contains the additional messaging communications as well as the sidebar text-entry field associated operable to receive said additional messaging communication:



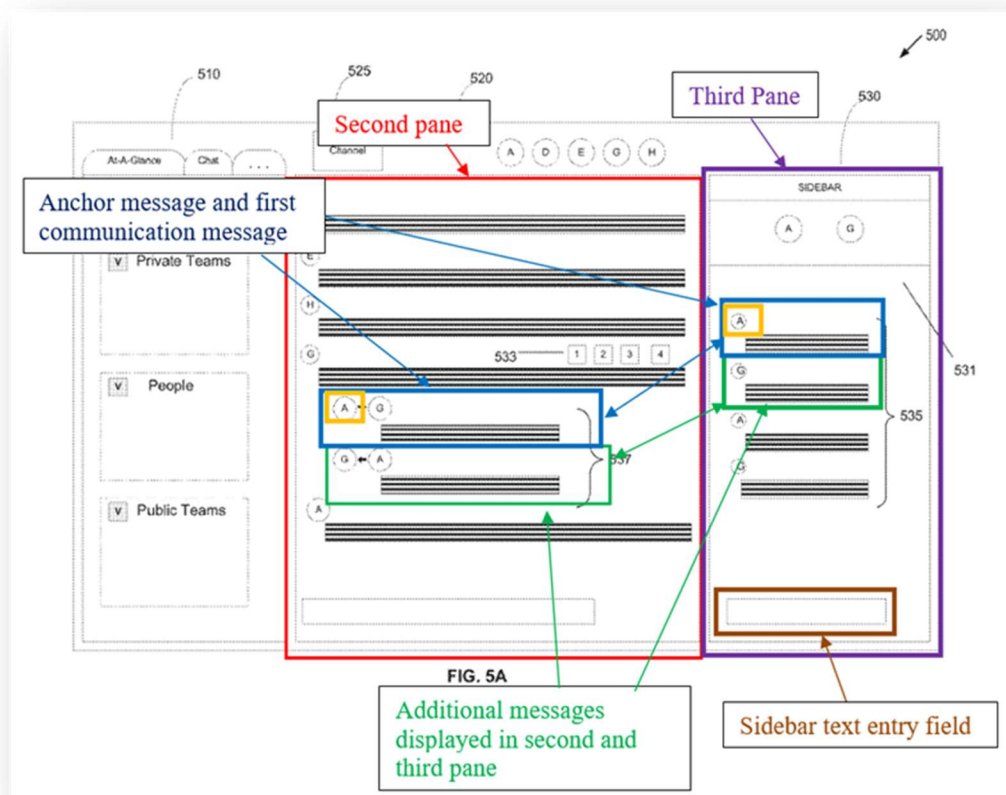
*Id.* at FIG. 5A (annotations added). Thus, Cohen discloses this claim.

### **G. Dependent Claim 7**

**The apparatus of claim 3, wherein displaying said additional messaging communication in said second pane comprises, while said additional messaging communication is displayed in said second pane, displaying identifying information associated with the anchor message in association with said additional messaging communication in said second pane.**

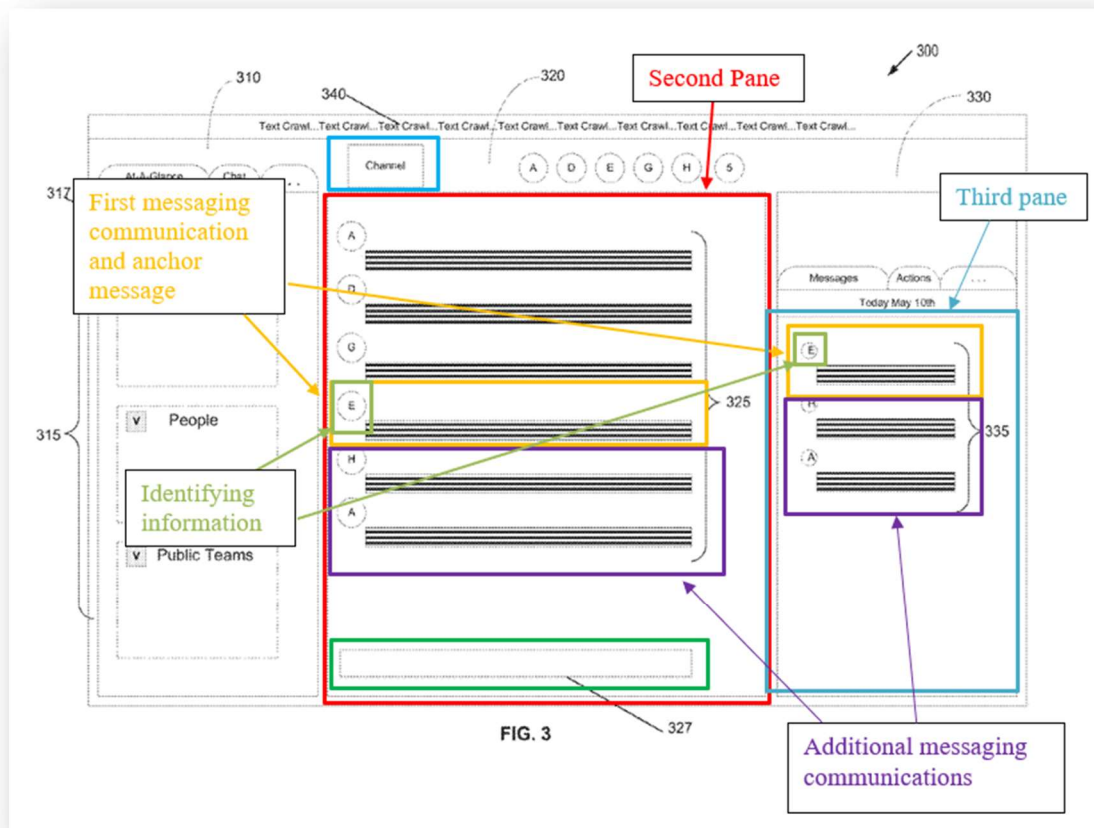
107. It is my opinion that Cohen discloses this claim. First, Cohen discloses the apparatus of claim 3 limitation, as described above, which is incorporated by reference. *See* Section X.C, *supra*. Second, Cohen teaches an “interactive interface portal 500 includes the capability of opening a sidebar selection 531 that allows two or more members, such as member A and G of a larger group session channel 525 to communicate privately in a private chat session 535.” Exh-1005 at [0073].

108. Figure 5A illustrates the display of the identifying information (member A) associated with the messages among the second and third panes:



*Id.* at FIG. 5A (annotations added).

109. Figure 3 also illustrates displaying the additional messaging communication in the second pane while the additional messaging communication is displayed in said second pane, displaying identifying information associated with the anchor message in association with said additional messaging communication in said second pane:



*Id.* at FIG 3 (annotations added). Thus, Cohen discloses this claim.

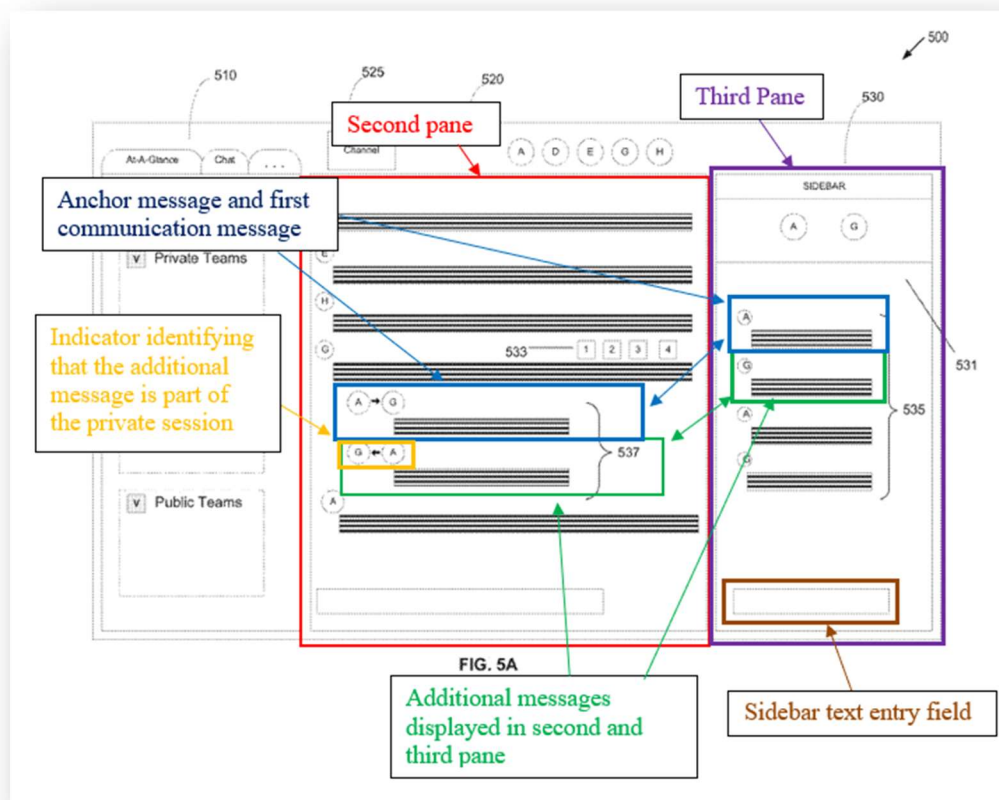
## H. Dependent Claim 8

**The apparatus of claim 3, wherein, displaying said additional messaging communication in said second pane comprises, while said additional messaging communication is displayed in said second pane, displaying an indicator identifying said additional messaging communication as associated with a subsidiary communication thread in association with said additional messaging communication in said second pane.**

110. It is my opinion that Cohen discloses this claim. First, Cohen discloses the apparatus of claim 3 limitation, as described above, which is incorporated by reference. *See* Section X.C, *supra*. Second, Cohen teaches an

“interactive interface portal 500 includes the capability of opening a sidebar selection 531 that allows two or more members, such as member A and G of a larger group session channel 525 to communicate privately in a private chat session 535.” Exh-1005 at [0073].

111. Figure 5A illustrates the display of an indicator identifying that there is a private communication session among members G and A, associated with the additional messages among the second and third panes:



*Id.* at FIG. 5A (annotations added). Additionally, a PHOSITA would have understood that there are two further indicators identifying additional messages as

part of a subsidiary communication thread. These indicators could include the indentation of related communications within the private chat session 537, as well as the truncation and scaling of the message items within that same session. Thus, Cohen discloses this claim.

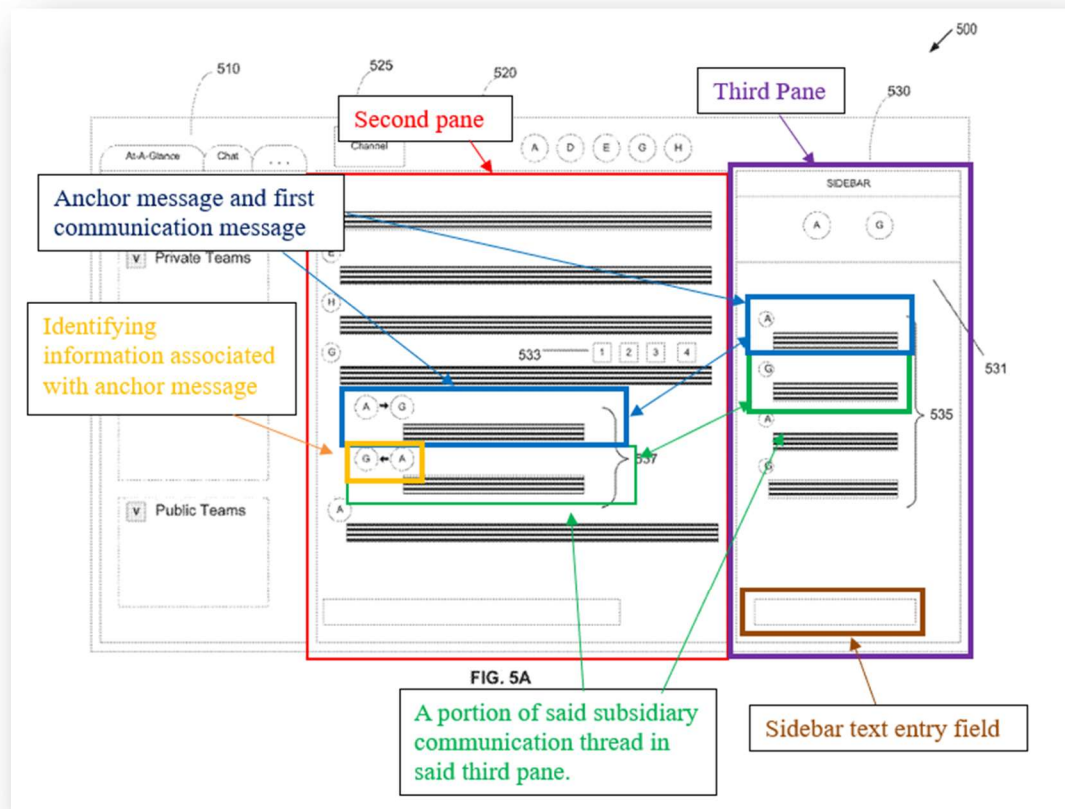
### **I. Dependent Claim 9**

**The apparatus of claim 7, wherein at least some of said identifying information associated with said anchor message comprises a fourth user-selectable control operable to cause the display of at least a portion of said subsidiary communication thread in said third pane.**

112. It is my opinion that Cohen discloses this claim. First, Cohen discloses the apparatus of claim 7 limitation, as described above, which is incorporated by reference. *See* Section X.G, *supra*. Second, Cohen teaches that when “a first chat participant, such as participant A, *clicks on and/or hovers over the display name* for a second chat participant, such as participant G, in the main window 520, a sidebar session 531 opens.” Exh-1005 at [0075] (emphasis added). A PHOSITA would have understood that the display name would constitute an action object (i.e., a “fourth user-selectable control”) and upon selection, causes the display of at least a portion of said subsidiary communication thread in said third pane. *See id.* at Abstract (teaching integrating various actionable objects into an online chat communications platform).

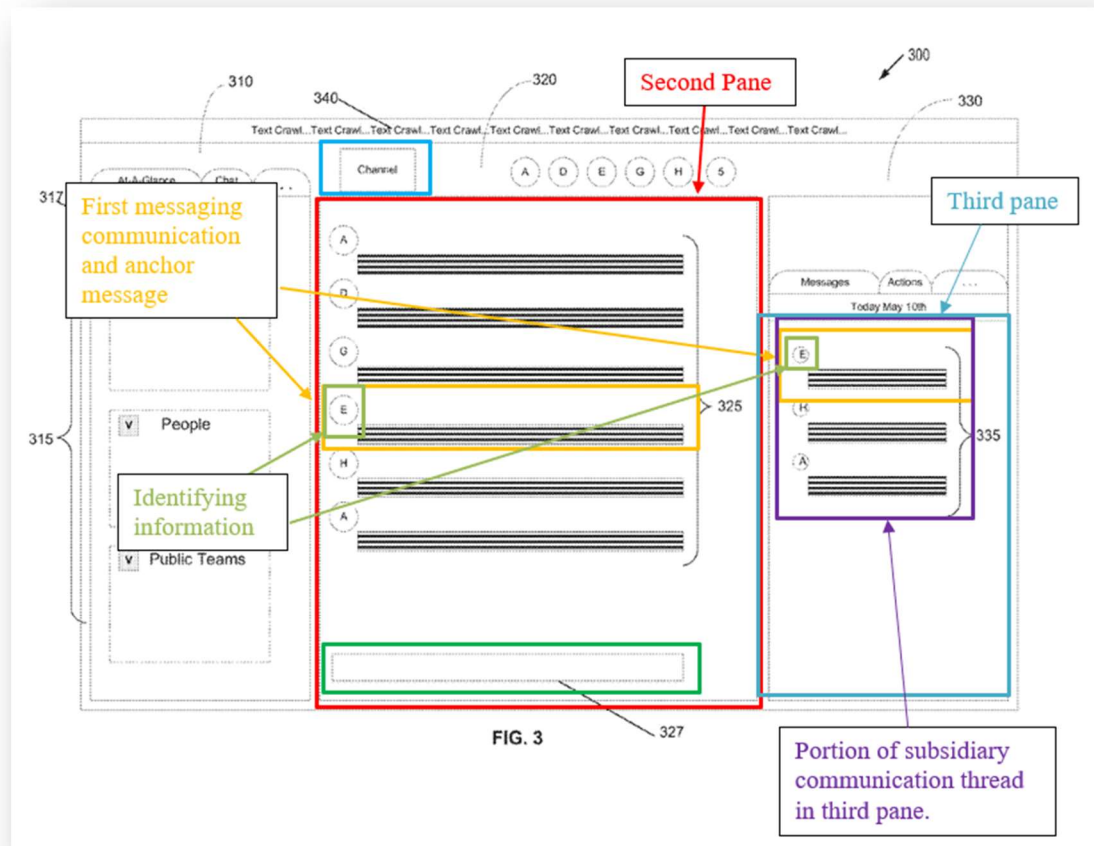
113. Figure 5A illustrates the display of the identifying information (members G and A and their private communication session indicated as G←A),

which is associated with the messages among the second and third panes.  $G \leftarrow A$  is associated with said anchor message, which originates from member A, as the arrow points from member A and because such messages are clearly displayed within the indented private session 537 with the anchor message displayed as the top-most message:



*Id.* at FIG. 5A (annotations added).

114. Figure 3 also illustrates where the identifying information is a fourth user selectable control (*Id.* at [0075]) causing the display of at least a portion of the subsidiary communication thread in the third pane:



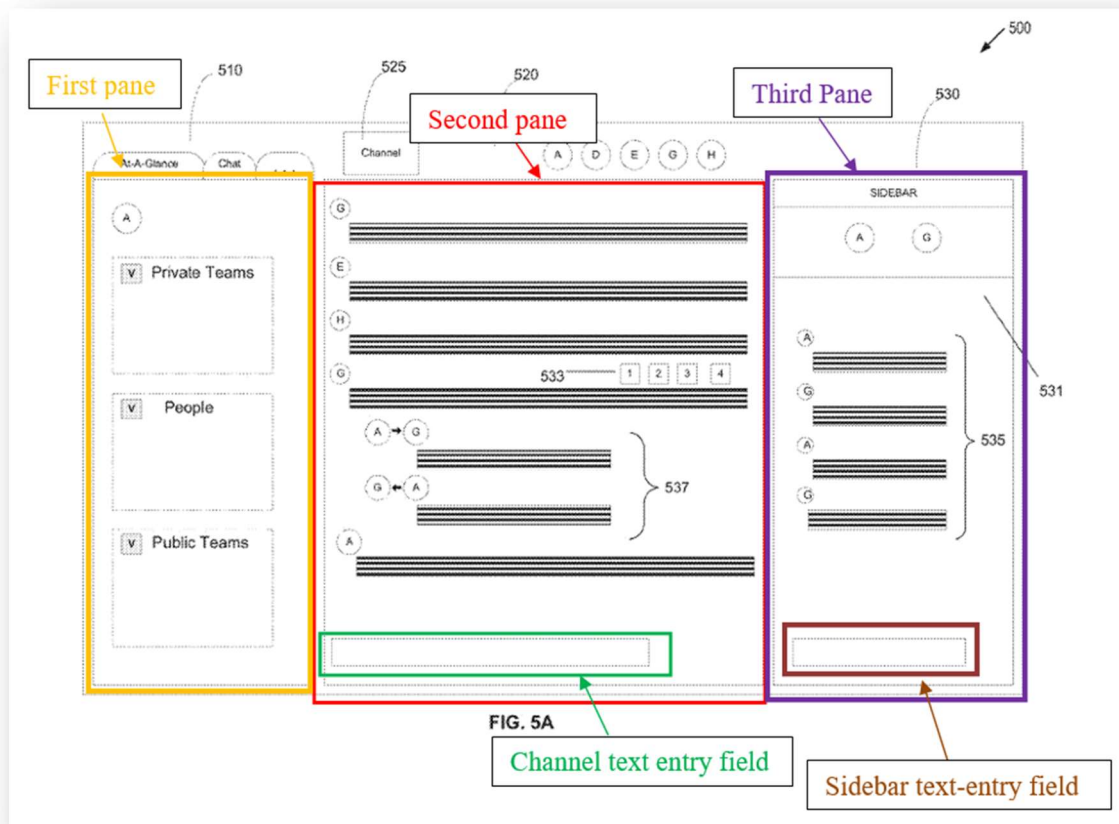
*Id.* at FIG. 3 (annotations added). Thus, Cohen discloses this claim.

#### J. Dependent Claim 10

The apparatus of claim 1, wherein displaying said third pane having said associated sidebar text-entry field further comprises displaying said sidebar text-entry field simultaneously with the display of said channel text-entry field, and wherein both said sidebar text-entry field and said channel text-entry field are selectable by a user to receive input representing a new message while they are being simultaneously displayed.

115. It is my opinion that Cohen discloses this claim. First, Cohen discloses the apparatus of claim 1 limitation, as described above, which is incorporated by reference. *See* Section X.A, *supra*. Second, Cohen teaches that sidebar session 531 allows a user to create a private chat session 535, enabling direct replies within a group chat that remain private from other members while retaining context and relevance to the broader conversation. Exh-1005 at [0072], [0075]. Cohen discloses that “the interactive interface portal 500 includes the capability of opening a sidebar selection 531 that allows two or more members ... to communicate privately in a private chat session 535.” *Id.* at [0073]. Further, “[t]he sidebar session 531 includes functions available to users of interface portal 500[,]” which includes a sidebar text-entry field operable to receive additional messaging communications. *Id.* at [0075].

116. Figure 5A illustrates third pane with a sidebar text-entry field displayed simultaneously with the first pane, second pane and channel text-entry field:



*Id.* at FIG. 5A (annotations added). Thus, Cohen discloses this claim.

### K. Dependent Claim 11

**The apparatus of claim 1, wherein transmitting said additional messaging communication, via said network, to at least one member of the group associated with the selected group-based communication channel comprises transmitting said additional messaging communication to fewer than all of the members of said group.**

117. It is my opinion that Cohen discloses this claim. First, Cohen discloses the apparatus of claim 1 limitation, as described above, which is incorporated by reference. *See* Section X.A, *supra*. Second, the sidebar session 531 also enables a user to create a “*private chat session* 535 to enhance the electronic

communications between the participants.” Exh-1005 at [0075] (emphasis added). This allows a user to “reply directly to someone in a group chat that can be kept private from other group members without having to engage the entire group, while retaining context and relativity to the broader conversation for the participants of the 1 to 1 conversation.” *Id.* at [0072]. “In some implementations, the private chat session 535 is hidden from other participants in the larger group session.” *Id.* at [0074]. This communication is conducted via a “communication network.” *Id.* at [0022]. Thus, Cohen discloses this claim.

#### **L. Dependent Claim 12**

**The apparatus of claim 1, further comprising instructions for receiving a request to permit a non-member user that is not a member of the associated group of members of said group-based communication channel to receive messaging communications comprising said subsidiary communication thread and, in response to receiving said request, enabling said non-member user to receive such communications.**

118. It is my opinion that Cohen discloses this claim. First, Cohen discloses the apparatus of claim 1 limitation, as described above, which is incorporated by reference. *See* Section X.A, *supra*. Second, Cohen teaches that “[i]n some implementations, the private chat session 535 in response to a request from the first participant or the second participant may permit a third participant to join the second chat session that is either currently in or not in the larger group session channel 525.” Exh-1005 at [0075]. Thus, Cohen discloses this claim.

## **M. Dependent Claim 13**

- 1. 13[pre] The apparatus of claim 1, further comprising instructions for displaying a fifth user-selectable control, said control being operable to:**

119. It is my opinion that Cohen discloses this claim. First, Cohen discloses the apparatus of claim 1 limitation, as described above, which is incorporated by reference. *See* Section X.A, *supra*. Second, Cohen teaches a “fifth user-selectable control.”

120. The fifth user-selectable control is the bundle creation. *See id.* at [0080]. A PHOSITA would understand that this would be one of the controls (533) available to the user. Once the bundle creation is underway, messages are selectively added to the bundle using selectors or indicators (554). *Id.* at [0081]. The messages within the bundle are a specific type (i.e., they are part of a bundle type). *See id.* As the messages are added to the bundle using selectors (554), they are selectively displayed at item (553). *Id.*

121. Regarding “from at least two channels” limitation, when a bundle is “Shared” and the “Allow others to Append” button is checked (552), a PHOSITA would understand that recipients across any channel could append to the bundle using an interface similar to that shown in Figure 5C. *Id.* Sharing among recipients across multiple channels is consistent with Cohen’s statement that “by integrating a system of identifying and grouping together past messages from within a channel

and even allowing those messages to be combined with other past messages from other channels.” *Id.* at [0016]. Thus, Cohen discloses this limitation.

**2. 13[a] in response to user selection of said fifth user-selectable control, selectively display messaging communications having a specific type associated with said selected fifth user-selectable control, said messaging communications being from at least two separate group-based communication channels.**

122. It is my opinion that Cohen discloses this limitation. Cohen teaches an “idea actionable object” (i.e., a “fifth user-selectable control) where “if the user selects the idea actionable object, the interface 400 may adjust the side panel 430 to provide characteristics relating to a *specific type* of input for an idea actionable object to include in the chat session. For example, the participants may be part of a work group and the sending participant wants to propose an idea to the work group.” Exh-1005 at [0067] (emphasis added).

123. Further, Cohen teaches “identifying and grouping together past messages from within a channel and even allowing those messages to be combined with other past messages from *other channels*.” *Id.* at [0016] (emphasis added). Cohen teaches the capability to perform broad searches across channels to locate information that meets the specified search criteria, which would encompass cross-channel searching. *See id.* at [0040] (“In some implementations, the interface portal 300 provides context relevant searching to display messages that match an inputted search criterion[.]”); *see id.* at [0041] (“a user . . . . may want to quickly

identify all of the ‘mutual’ chats/conversations . . . with the other person,” which “allows the user to switch between chat groups, dialogs, threads or conversations.”).

124. Additionally, Cohen teaches the use of “bundle communications [that] can include a bundle message associated with a particular topic, such as a bundle of best practices or a bundle consisting of an important team discussion or decisions.” *Id.* at [0080]. “The discussion bundle 550 may include . . . an indicator of the messages 553 included in the bundle.” *Id.* at [0081]. Further, “[a]fter identifying the message to be included discussion bundle 550, the sending participant may integrate discussion bundle 550 into chat session by activating a control 555 on the interface portal 500. In this regard, an indicator 556 of the messages incorporated in the chat session may be displayed on the main window 520 of the interface portal 500.” *Id.* Thus, Cohen discloses this limitation.

#### **N. Dependent Claim 14**

**The apparatus of claim 13, wherein said specific type is a class of messaging communications in which the messaging communications are all parts of subsidiary communication threads that incorporate messaging communications generated by a specific user of said system.**

125. It is my opinion that Cohen discloses this claim. First, Cohen discloses the apparatus of claim 13 limitation, as described above, which is incorporated by reference. *See* Section X.M, *supra*. Second, Cohen teaches that “if the user selects the idea actionable object, the interface 400 may adjust the side

panel 430 to provide characteristics relating to a *specific type* of input for an idea actionable object to include in the chat session. For example, the participants may be part of a work group and the sending participant wants to propose an idea to the work group.” Exh-1005 at [0067] (emphasis added). This demonstrates that Cohen discloses messaging communications specific to particular inputs or actions initiated by a user.

126. Further, Cohen teaches “identifying and grouping together past messages from within a channel and even allowing those messages to be combined with other past messages from *other channels*.” *Id.* at [0016] (emphasis added). Cohen teaches the capability to perform broad searches across channels and threads to locate information, such as messaging communications generated by a specific user, that meets the specified search criteria. *See id.* at [0040] (“In some implementations, the interface portal 300 provides context relevant searching to display messages that match an inputted search criterion[.]”); *see id.* at [0041] (“a user . . . . may want to quickly identify all of the ‘mutual’ chats/conversations . . . . with the other person,” which “allows the user to switch between chat groups, dialogs, threads or conversations.”).

127. Additionally, Cohen teaches the use of “bundle communications [that] can include a bundle message associated with a particular topic, such as a bundle of best practices or a bundle consisting of an important team discussion or

decisions.” *Id.* at [0080]. The discussion bundle 550 may include . . . . an indicator of the messages 553 included in the bundle.” *Id.* at [0081]. Further, “[a]fter identifying the message to be included discussion bundle 550, the sending participant may integrate discussion bundle 550 into chat session by activating a control 555 on the interface portal 500. In this regard, an indicator 556 of the messages incorporated in the chat session may be displayed on the main window 520 of the interface portal 500.” *Id.* For example, in FIG. 5C, user A could select only the messages associated with one particular user, such as the two messages from user G, where the bundle type is a class of messages from user G. A PHOSITA would understand that user A might share the message amongst recipients with “Allow others To Append” selected, and a bundle name “Please add messages from G”:

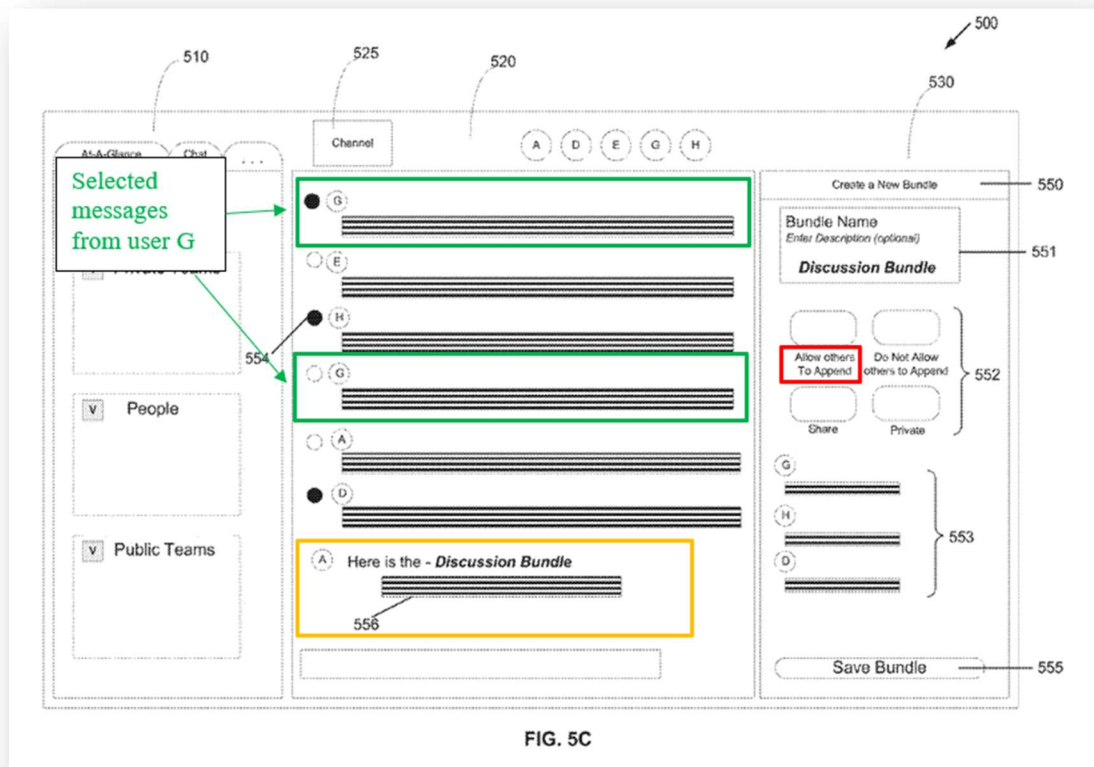


FIG. 5C

*Id.* at FIG. 5C (annotations added).

128. Cohen also teaches the use of a side bar session 533 (i.e., a subsidiary communication thread) where participants may interact directly with one another outside of larger group session channel 525. *Id.* at [0075]. A PHOSITA would understand that this side bar session allows for communication threads that are specific to certain users, incorporating messages generated by those users within a subsidiary thread. Thus, Cohen discloses this claim.

#### O. Independent Claim 15

1. **15[pre] A method for operating an apparatus for use with a group-based communication system to facilitate messaging**

**communication over a network between users of said system, comprising:**

129. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.1, *supra*.

2. **15[a] generating a group-based communication interface on a display screen of a user client device, the group-based communication interface defining:**

130. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.3, *supra*.

3. **15[b] a first pane configured to display a plurality of channel identifiers, each of said plurality of channel identifiers corresponding to a respective one of a plurality of group-based communication channels, each of such channels having an associated group of members who are users of said system, and**

131. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.4, *supra*.

4. **15[c] a second pane configured to display messaging communications associated with a selected one of said plurality of group-based communication channels corresponding to one of said plurality of channel identifiers,**

132. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.5, *supra*.

5. **15[d] wherein, associated with said second pane, is a channel text entry field that is user operable to generate communication in said selected one of said plurality of group-based communication channels, and a title field**

**displaying information identifying said selected one of said plurality of group-based communication channels,**

133. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.6, *supra*.

- 6. 15[e] receiving a first messaging communication associated with the selected one of the plurality of group-based communication channels, the selected one of the plurality of group-based communication channels comprising messaging communications, including said first messaging communication, between members of the group associated with said selected one of the plurality of group-based communication channels;**

134. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.7, *supra*.

- 7. 15[f] displaying said first messaging communication within said second pane;**

135. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.8, *supra*.

- 8. 15[g] displaying a first user-selectable control associated with said first messaging communication;**

136. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.9, *supra*.

- 9. 15[h] in response to a user selection of said first user-selectable control, displaying a third pane, said third pane displaying said first messaging communication and having an associated sidebar text-entry field that is different from**

**said channel text-entry field and operable to receive user input of an additional messaging communication;**

137. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.10, *supra*.

**10. 15[i] wherein said third pane and said sidebar text-entry field are displayed simultaneously with said first pane, said second pane and said channel text-entry field; and**

138. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.11, *supra*.

**11. 15[j] wherein said first messaging communication is displayed within said third pane and said second pane simultaneously;**

139. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.12, *supra*.

**12. 15[k] receiving user input of an additional messaging communication in said sidebar text-entry field;**

140. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.13, *supra*.

**13. 15[l] after receipt of said user input: transmitting said additional messaging communication, via a network, to at least one member of the group associated with said selected group-based communication channel and**

141. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.14, *supra*.

**14. 15[m] displaying, in said third pane, a first subsidiary communication thread having an anchor message, said**

**thread comprising said first messaging communication together with said additional messaging communication, wherein said first messaging communication is the anchor message of said first subsidiary communication thread;**

142. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.15, *supra*.

**15. 15[n] displaying a second user-selectable control associated with said first messaging communication in said second pane, said second user-selectable control being associated with an indication that said first messaging communication is an anchor message of a subsidiary communication thread and being configured to:**

143. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.16, *supra*.

**16. 15[o] in response to a user selection of said second user-selectable control, cause at least a portion of said first subsidiary communication thread containing said first messaging communication to be displayed in said third pane.**

144. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.17, *supra*.

**P. Dependent Claim 16**

**The method of claim 15, further comprising displaying said additional messaging communication in said second pane while said additional messaging communication is being displayed in said third pane.**

145. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Sections X.B, X.O, *supra*.

**Q. Dependent Claim 17**

1. **17[pre] The method of claim 16, wherein displaying said additional messaging communication in said second pane comprises providing a third user-selectable control associated with said additional messaging communication in said second pane, wherein said third user-selectable control is configured to:**

146. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Sections X.C.1, X.P, *supra*.

2. **17[a] in response to user selection of said third user-selectable control, cause at least a portion of said first subsidiary communication thread containing said additional messaging communication to be displayed in a third pane.**

147. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.C.2, *supra*.

**R. Dependent Claim 18**

**The method of claim 17, wherein displaying said additional messaging communication in said second pane comprises causing at least a portion of said subsidiary communication thread to be displayed in said third pane comprises displaying said sidebar text-entry field associated with said third pane that is operable to receive said additional messaging communication.**

148. It is my opinion that Cohen discloses this claim, as described above, which is incorporated by reference. *See* Sections X.F, X.Q, *supra*.

**S. Dependent Claim 19**

**The method of claim 17, wherein displaying said additional messaging communication in said second pane comprises, while said additional messaging communication is displayed in said second pane, identifying information associated with the anchor message is also displayed in**

**association with said additional messaging communication in said second pane.**

149. It is my opinion that Cohen discloses this claim, as described above, which is incorporated by reference. *See* Sections X.G, X.Q, *supra*.

**T. Dependent Claim 20**

**The method of claim 17, wherein, while said additional messaging communication is displayed in said second pane, an indicator identifying said additional messaging communication as associated with a subsidiary communication thread is also displayed in association with said additional messaging communication in said second pane.**

150. It is my opinion that Cohen discloses this claim, as described above, which is incorporated by reference. *See* Sections X.H, X.Q, *supra*.

**U. Dependent Claim 21**

**The method of claim 19, wherein at least some of said identifying information associated with said anchor message comprises a fourth user-selectable control operable to cause the display of at least a portion of said subsidiary communication thread in said third pane.**

151. It is my opinion that Cohen discloses this claim, as described above, which is incorporated by reference. *See* Sections X.I, X.S *supra*.

**V. Dependent Claim 22**

**The method of claim 15, wherein displaying said third pane having said associated sidebar text-entry field further comprises displaying said sidebar text-entry field simultaneously with the display of said channel text-entry field, and wherein both said sidebar text-entry field and said channel text-entry field are selectable by a user to receive input representing a new message while they are being simultaneously displayed.**

152. It is my opinion that Cohen discloses this claim, as described above, which is incorporated by reference. *See* Sections X.J, X.O, *supra*.

**W. Dependent Claim 23**

1. **23[pre] The method of claim 15, further comprising displaying a fifth user-selectable control, said control being operable to:**

153. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Sections X.M.1, X.O, *supra*.

2. **23[a] in response to user selection of said fifth user-selectable control, selectively display messaging communications having a specific type associated with said selected fifth user-selectable controls, said messaging communications being from at least two separate group-based communication channels.**

154. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.M.2, *supra*.

**X. Dependent Claim 24**

**The method of claim 23, wherein said specific type is a class of messaging communications in which the messaging communications are all parts of subsidiary communication threads that incorporate messaging communications generated by a specific user of said system.**

155. It is my opinion that Cohen discloses this claim, as described above, which is incorporated by reference. *See* Sections X.N, X.W, *supra*.

**Y. Independent Claim 25**

1. **25[pre] One or more non-transitory computer-readable media storing instructions executable by one or more processors that, when executed by the one or more**

**processors, cause the one or more processors to perform acts comprising:**

156. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.2, *supra*.

- 2. 25[a] generating a group-based communication interface on a display screen of a user client device, the group-based communication interface defining:**

157. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.3, *supra*.

- 3. 25[b] a first pane configured to display a plurality of channel identifiers, each of said plurality of channel identifiers corresponding to a respective one of a plurality of group-based communication channels, each of such channels having an associated group of members who are users of said system, and**

158. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.4, *supra*.

- 4. 25[c] a second pane configured to display messaging communications associated with a selected one of said plurality of group-based communication channels corresponding to one of said plurality of channel identifiers,**

159. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.5, *supra*.

- 5. 25[d] wherein, associated with said second pane, is a channel text entry field that is user operable to generate communication in said selected one of said plurality of group-based communication channels, and a title field**

**displaying information identifying said selected one of said plurality of group-based communication channels,**

160. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.6, *supra*.

- 6. 25[e] receiving a first messaging communication associated with the selected one of the plurality of group-based communication channels, the selected one of the plurality of group-based communication channels comprising messaging communications, including said first messaging communication, between members of the group associated with said selected one of the plurality of group-based communication channels;**

161. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.7, *supra*.

- 7. 25[f] displaying said first messaging communication within said second pane;**

162. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.8, *supra*.

- 8. 25[g] displaying a first user-selectable control associated with said first messaging communication;**

163. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.9, *supra*.

- 9. 25[h] in response to a user selection of said first user-selectable control, displaying a third pane, said third pane displaying said first messaging communication and having an associated sidebar text-entry field that is different from**

**said channel text-entry field and operable to receive user input of an additional messaging communication;**

164. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.10, *supra*.

**10. 25[i] wherein said third pane and said sidebar text-entry field are displayed simultaneously with said first pane, said second pane and said channel text-entry field; and**

165. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.11, *supra*.

**11. 25[j] wherein said first messaging communication is displayed within said third pane and said second pane simultaneously;**

166. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.12, *supra*.

**12. 25[k] receiving user input of an additional messaging communication in said sidebar text-entry field;**

167. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.13, *supra*.

**13. 25[l] after receipt of said user input: transmitting said additional messaging communication, via a network, to at least one member of the group associated with said selected group-based communication channel and**

168. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.14, *supra*.

**14. 25[m] display, in said third pane, a first subsidiary communication thread having an anchor message, said**

**thread comprising said first messaging communication together with said additional messaging communication, wherein said first messaging communication is the anchor message of said first subsidiary communication thread;**

169. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.15, *supra*.

- 15. 25[n] displaying a second user-selectable control associated with said first messaging communication in said second pane, said second user-selectable control being associated with an indication that said first messaging communication is an anchor message of a subsidiary communication thread, and being configured to:**

170. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.16, *supra*.

- 16. 25[o] in response to a user selection of said second user-selectable control, cause at least a portion of said first subsidiary communication thread containing said first messaging communication to be displayed in said third pane.**

171. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.17, *supra*.

## **Z. Dependent Claim 26**

**The one or more non-transitory computer-readable media of claim 25, wherein said acts further comprise displaying said additional messaging communication in said second pane while said additional messaging communication is being displayed in said third pane.**

172. It is my opinion that Cohen discloses this claim, as described above, which is incorporated by reference. *See* Sections X.B, X.Y, *supra*.

**AA. Dependent Claim 27**

1. **27[pre] The one or more non-transitory computer-readable media of claim 26, wherein displaying said additional messaging communication in said second pane comprises providing a third user-selectable control associated with said additional messaging communication in said second pane, wherein said third user-selectable control is configured to:**

173. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Sections X.B.1, X.Z, *supra*.

2. **27[a] in response to user selection of said third user-selectable control, cause at least a portion of said first subsidiary communication thread containing said additional messaging communication to be displayed in a third pane.**

174. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.B.2, *supra*.

**BB. Dependent Claim 28**

1. **28[pre] The one or more non-transitory computer-readable media of claim 25, further comprising instructions for displaying a fifth user-selectable control, said control being operable to:**

175. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Sections X.M.1, X.Y, *supra*.

2. **28[a] in response to user selection of said fifth user-selectable control, selectively display messaging communications having a specific type associated with said selected fifth user-selectable controls, said messaging**

**communications being from at least two separate group-based communication channels.**

176. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.M.2, *supra*.

**CC. Dependent Claim 29**

**The one or more non-transitory computer-readable media of claim 28, wherein said specific type is a class of messaging communications in which the messaging communications are all parts of subsidiary communication threads that incorporate messaging communications generated by a specific user of said system.**

177. It is my opinion that Cohen discloses this claim, as described above, which is incorporated by reference. *See* Sections X.N, X.BB *supra*.

**DD. Independent Claim 30**

- 1. 30[pre] An apparatus comprising at least a processor, and a memory associated with the processor having computer coded instructions therein, wherein the computer coded instructions are configured to, when executed by the processor, cause the apparatus to perform acts comprising:**

178. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Sections X.A.1–2, *supra*.

- 2. 30[a] receiving a first messaging communication associated with a communication platform;**

179. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.A.7, *supra*.

**3. 30[b] causing the first messaging communication to be rendered within a messaging pane in a communication interface of the communication platform;**

180. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Sections X.A.5, X.A.8, *supra*.

**4. 30[c] receiving a thread request to create a subsidiary thread communication;**

181. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Sections X.A.16–17, *supra*. Further, Cohen teaches the creation of a sidebar session (i.e., subsidiary thread communication). Exh-1005, [0072], FIG 5A; *see also id.* at [0074] (“in some implementations, the private chat session 535 *in response to a request* from the first participant or the second participant may permit a third participant to join the second chat session that is either currently in or not in the larger group session channel 525.” (emphasis added)). This demonstrates that the response to a participant’s request initiates the creation of a subsidiary thread communication within the broader group environment. Thus, Cohen discloses this limitation.

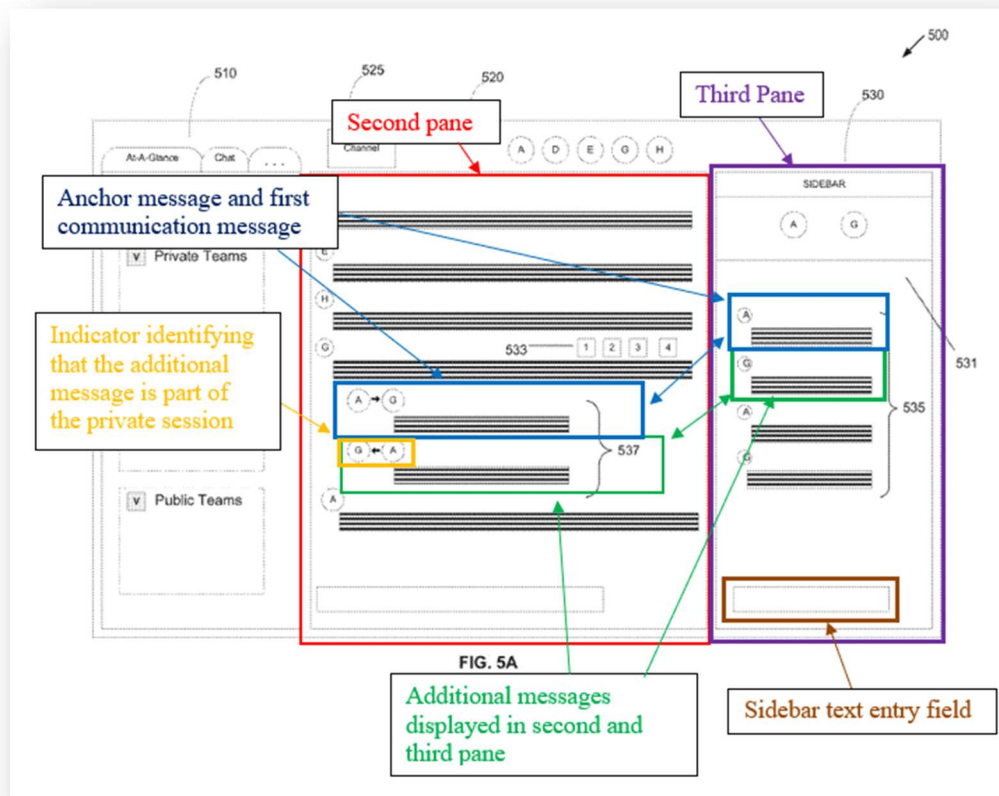
**5. 30[d] in response to receiving the thread request, generating and transmitting for display a thread summary indicator renderable within the messaging pane proximate the first messaging communication, wherein the thread summary indicator is configured to be selectable by a user with access to the first messaging communication;**

182. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Sections X.A.16–17, *supra*.

Further, Cohen teaches that, “the interface portal 500 may include controls 533 to *integrate of some or all of the private chat session 537 into the larger group session channel 525* for display to other participants.” Exh-1005 at [0074] (emphasis added); *see also id.* (“In some implementations, the *private chat session 535* in response to a request from the first participant or the second participant may permit a third participant to join *the second chat session that is either currently in or not in the larger group session channel 525.*” (emphasis added)). This indicates that a thread summary indicator may be embedded within the messaging pane, proximate the first messaging communication.

183. Further, Cohen teaches that “[t]he first chat participant may also initiate the sidebar session 531 by activating a control 533 associated with a message from the second chat participant.” *Id.* at [0075] (emphasis added). Cohen discloses that item 537 (within the main window 520) presents a “*private chat session 537*” between members A and G (i.e., a thread summary indicator). *Id.* at [0074]. This indicates that the thread summary indicator associated among the messages of the private chat session are user selectable.

184. For example, Figure 5A illustrates the display of a thread summary indicator identifying that there is a private communication session among members G and A, associated with the additional messages among the second and third panes:

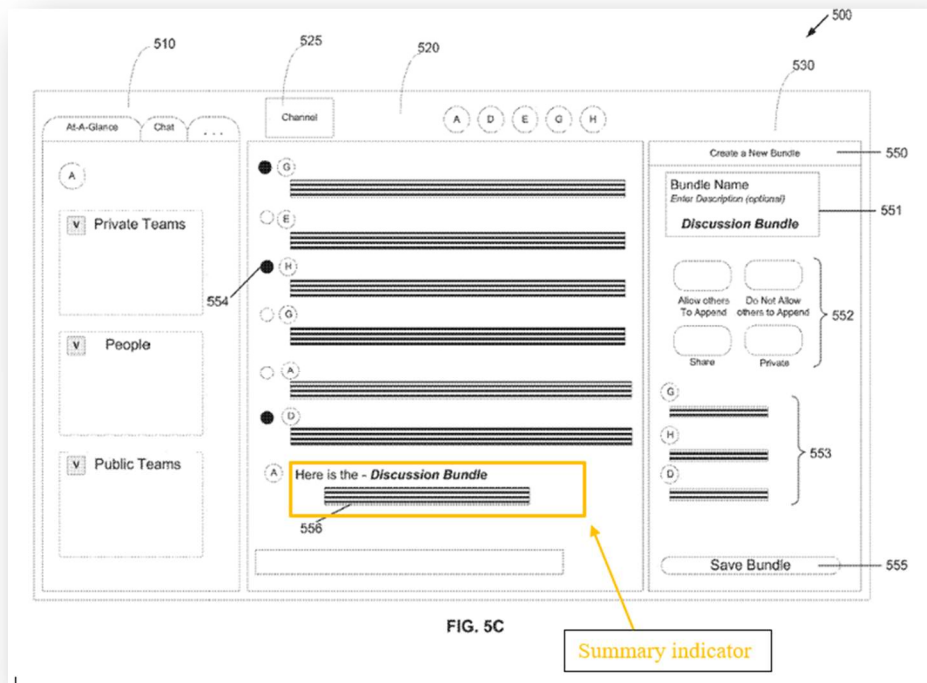


*Id.* at FIG. 5A (annotations added). Additionally, a PHOSITA would have understood that there are two further thread summary indicators identifying additional messages as part of a subsidiary communication thread. These indicators include the indentation of related communications within the private chat session 537, as well as the truncation and scaling of the message items within that same session.

185. Alternatively, Cohen teaches the use of “bundle communications [that] can include a bundle message associated with a particular topic, such as a bundle of best practices or a bundle consisting of an important team discussion or

decisions.” *Id.* at [0080]. The discussion bundle 550 may include . . . an indicator of the messages 553 included in the bundle.” *Id.* at [0081]. Further, “[a]fter identifying the message to be included discussion bundle 550, the sending participant may integrate discussion bundle 550 into chat session by activating a control 555 on the interface portal 500. In this regard, an **indicator 556** of the messages incorporated in the chat session may be displayed on **the main window 520** of the interface portal 500.” *Id.* (emphasis added). A PHOSITA would understand that the bundle communication indicator (i.e., summary indicator) may also be placed even closer to an associated messaging communication similar to the placement of indicator 554. *See id.*, FIG. 5C.

186. Figure 5C further illustrates this concept, showing an indicator corresponding to a bundle of communications placed within the main window 520 and near a first messaging communication, supporting Cohen’s disclosure of this limitation:



*Id.* at FIG. 5C (annotations added). A PHOSITA would understand that this bundle of communications functions as a summary of related messaging, with a corresponding indicator appearing within the messaging pane, near the first messaging communication. This setup provides a clear and accessible summary of discussions or messages organized by a particular topic or thread, with the indicator strategically positioned for user selection. This configuration aligns with the claimed functionality, where the thread summary indicator is displayed in proximity to the first messaging communication, enhancing efficient user interaction. Thus, Cohen discloses this limitation.

6. **30[e] receiving an indication of an input indicating a selection of the thread summary indicator; and**

187. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Section X.DD.5, *supra*.

7. **30[f] causing, based at least in part on receiving the indication of the input, rendering of the subsidiary thread communication to a thread communication pane within the communication interface, wherein a list pane, the messaging pane, and the thread communication pane are configured to be rendered within a defined display window as viewable simultaneously.**

188. It is my opinion that Cohen discloses this limitation, as described above, which is incorporated by reference. *See* Sections X.A.15–17, *supra*.

## **XI. EXHIBITS**

- A. **Exhibit 1010, Quentin Jones, et al. “Empirical Evidence of Information Overload Constraining Chat Channel Community Interactions.” In *Proceedings of the 2008 ACM Conference on Computer Supported Cooperative Work (CSCW ‘08)*, Association for Computing Machinery, New York, NY, USA, 323–332 (2008)**

189. Exhibit 1010 is a copy of the publication of Quentin Jones, et al. “Empirical Evidence of Information Overload Constraining Chat Channel Community Interactions.” In *Proceedings of The 2008 ACM Conference On Computer Supported Cooperative Work (CSCW ‘08)*, Association for Computing Machinery, New York, NY, USA, 323–332 (2008) that I personally found and located at the publicly accessible website:

<https://doi.org/10.1145/1460563.1460616>. Exhibit 1010 is a true and correct copy

of this publication and is in a condition that creates no suspicion within me about its authenticity. I believe this document is what it purports to be. As an expert in this field, I have personal knowledge of this Exhibit and that it was publicly available before November 2015.

**B. Exhibit 1018, Thomas F. Stafford & Dennis Gonier, *What Americans Like About Being Online*, 47 Communications of the ACM, 107, 107–12 (2004)**

190. Exhibit 1018 is a copy of the publication of Thomas F. Stafford and Dennis Gonier, *What Americans Like About Being Online*, 47 Communications of the ACM, 107, 107–12 (2004) that I personally found and located at the publicly accessible website: <https://doi.org/10.1145/1-29496.1029502>. Exhibit 1018 is a true and correct copy of this publication and is in a condition that creates no suspicion within me about its authenticity. I believe this document is what it purports to be. As an expert in this field, I have personal knowledge of this Exhibit and that it was publicly available before November 2015.

**XII. CONCLUSION**

191. For the foregoing reasons, I believe that Claims 1-30 are anticipated by Cohen.

Dated: September 26, 2024

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Andrew Cockburn", written over a horizontal line.

DR. ANDREW COCKBURN

## APPENDIX A: Information Considered

| <b><i>Exhibit No.</i></b> | <b><i>Description</i></b>                                                                                                                                                                                                                                                                        |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Exh-1001</b>           | U.S. Patent No. 11,973,731 to Cohen                                                                                                                                                                                                                                                              |
| <b>Exh-1002</b>           | File History for Application No. 18/535,572                                                                                                                                                                                                                                                      |
| <b>Exh-1005</b>           | U.S. Pub. No. 2017/0134316 (“Cohen”)                                                                                                                                                                                                                                                             |
| <b>Exh-1009</b>           | Provisional Application No. 62/253,229                                                                                                                                                                                                                                                           |
| <b>Exh-1010</b>           | Quentin Jones, et al. “Empirical Evidence of Information Overload Constraining Chat Channel Community Interactions.” In <i>Proceedings of the 2008 ACM Conference on Computer Supported Cooperative Work (CSCW ‘08)</i> , Association for Computing Machinery, New York, NY, USA, 323–332 (2008) |
| <b>Exh-1013</b>           | U.S. Application No. 15/858,696                                                                                                                                                                                                                                                                  |
| <b>Exh-1015</b>           | U.S. Provisional Application No. 62/666,137                                                                                                                                                                                                                                                      |
| <b>Exh-1018</b>           | Thomas F. Stafford and Dennis Gonier, <i>What Americans Like About Being Online</i> , 47 Communications of the ACM, 107, 107–12 (2004)                                                                                                                                                           |