

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

v.

WRINKL, INC.,
Patent Owner

Case No.: IPR2024-01490
U.S. Patent No. 11,973,731

**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**”
Patent Trial and Appeal Board
U.S. Patent and Trademark Office
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', written over a horizontal line.

DR. ANDREW COCKBURN

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION	1
II. OVERVIEW	2
A. Relevant Training, Experience, and Background.	2
B. Compensation.....	7
C. Documents and Materials Relied Upon.	7
III. STATEMENT OF LEGAL PRINCIPLES.....	8
A. Claim Construction.....	8
B. Anticipation.	9
C. Obviousness.....	10
IV. THE '731 PATENT.....	11
V. OVERVIEW OF THE STATE OF THE ART.....	13
VI. ORDINARY SKILLED ARTISAN	16
VII. CLAIM CONSTRUCTION	17
VIII. OFFERED ART.....	17
A. Kakuta.....	17
B. Matsumoto.....	20
C. Chang.....	22
IX. GROUND 1: KAKUTA ANTICIPATES CLAIMS 1-7, 9-12, 15-19, 21-22, 25-27, AND 30	23
A. Independent Claim 1	23
B. Dependent Claim 2	64

C.	Dependent Claim 3	66
D.	Dependent Claim 4	70
E.	Dependent Claim 5	75
F.	Dependent Claim 6	77
G.	Dependent Claim 7	78
H.	Dependent Claim 9	80
I.	Dependent Claim 10	84
J.	Dependent Claim 11	85
K.	Dependent Claim 12	89
L.	Independent Claim 15	90
M.	Dependent Claim 16	94
N.	Dependent Claim 17	95
O.	Dependent Claim 18	95
P.	Dependent Claim 19	95
Q.	Dependent Claim 21	96
R.	Dependent Claim 22	96
S.	Independent Claim 25	96
T.	Dependent Claim 26	100
U.	Dependent Claim 27	101
V.	Independent Claim 30	101
X.	GROUND 2: CLAIMS 1-7, 9-19, AND 21-30 ARE OBVIOUS OVER KAKUTA	109
A.	Claims 1, 3, 13, 15, 17, 23, 25, and 27-28, and Dependent Claims 2-7, 9-14, 16-19, 21-24, and 26-30	109

B.	Claim 4	117
C.	Claims 9 and 21	118
D.	Claim 12	119
E.	Claims 13, 14, 23, 24, 28, and 29.....	120
F.	Claim 30	127
XI.	GROUND 3: CLAIMS 1-7, 9-19, AND 21-29 ARE OBVIOUS OVER KAKUTA IN VIEW OF MATSUMOTO.....	128
A.	Claims 1, 15, and 25 and Dependent Claims 2-7, 9-14, 16-19, 21-24, and 26-29 Are Obvious Over Kakuta In View of Matsumoto.....	128
B.	Dependent Claim 13.....	131
C.	Dependent Claim 14.....	133
D.	Dependent Claim 23.....	134
E.	Dependent Claim 24.....	135
F.	Dependent Claim 28.....	135
G.	Dependent Claim 29.....	135
XII.	GROUND 4: CLAIMS 1-29 ARE OBVIOUS OVER KAKUTA IN VIEW OF MATSUMOTO AND CHANG.....	135
A.	Claims 1, 15, and 25 and Dependent Claims 1-14, 16-24, and 26-29	135
B.	Claim 4	139
C.	Claims 8 and 20.....	141
D.	Claim 12	144
XIII.	GROUND 5: CLAIM 30 IS OBVIOUS OVER KAKUTA IN VIEW OF CHANG	146
A.	Claim 30	146

XIV. MOTIVATION TO COMBINE KAKUTA, MATSUMOTO, AND/OR CHANG.....	148
XV. EXHIBITS	152
A. Exhibit 1012, John E. Grayson, Python and Tkinter Programming, (2000)	152
B. Exhibit 1013, Apple, Human Interface Guidelines: The Apple Desktop Interface (1987).....	153
C. Exhibit 1014, 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)	153
D. Exhibit 1015, Andrew Cockburn and Saul Greenberg, “Making Contact: Getting the Group Communicating with Groupware.” In <i>Proceedings of the conference on Organizational computing systems (COCS ‘93)</i> , Association for Computing Machinery, New York, NY, USA, 31–41 (1993)	154
E. Exhibit 1016, Thomas F. Stafford & Dennis Gonier, <i>What Americans Like About Being Online</i> , 47 Communications of the ACM, 107, 107– 12 (2004)	155
XVI. CONCLUSION.....	155
APPENDIX A: Information Considered.....	156

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, and prior art including Kakuta, Matsumoto, and Chang, 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 what I

understand is the asserted earliest claimed priority date of the claimed subject matter in the '731 Patent, November 10, 2015, as well as shortly thereafter. I understand that there is a dispute as to the priority date, but used a priority date of November 10, 2015, for the purposes of this declaration.

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 November 10, 2015.

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.

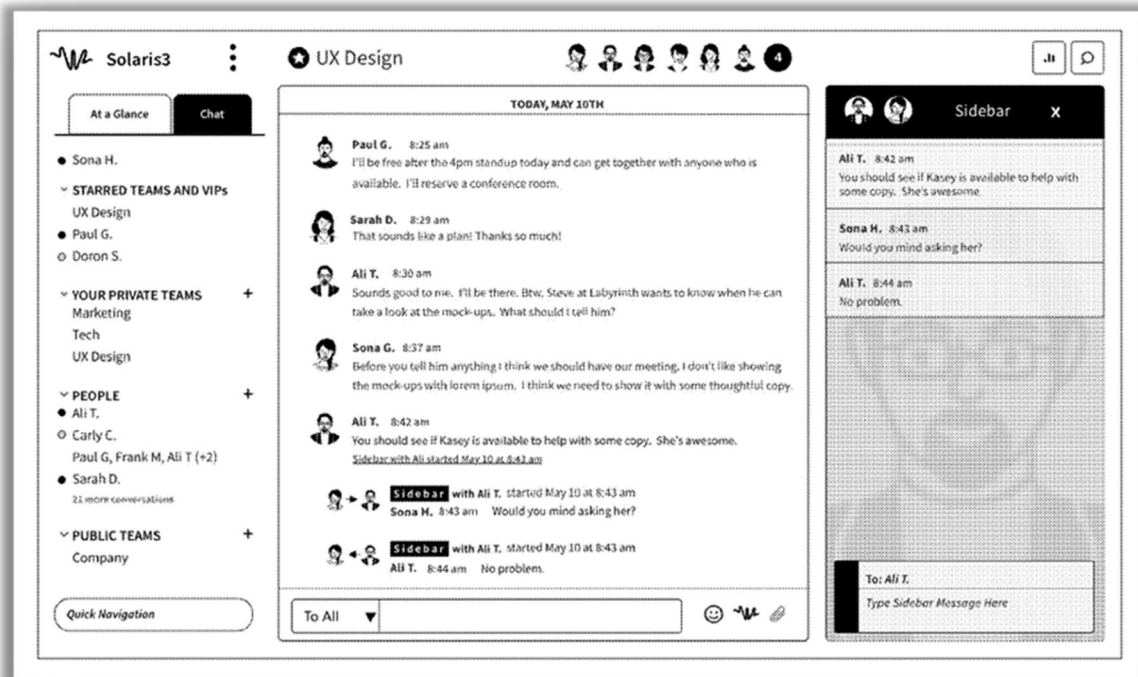
IV. THE '731 PATENT

30. 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.*

31. 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.

32. 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

33. 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.

34. 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.

35. 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.

36. 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.

37. 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-1016. 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.

38. 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.

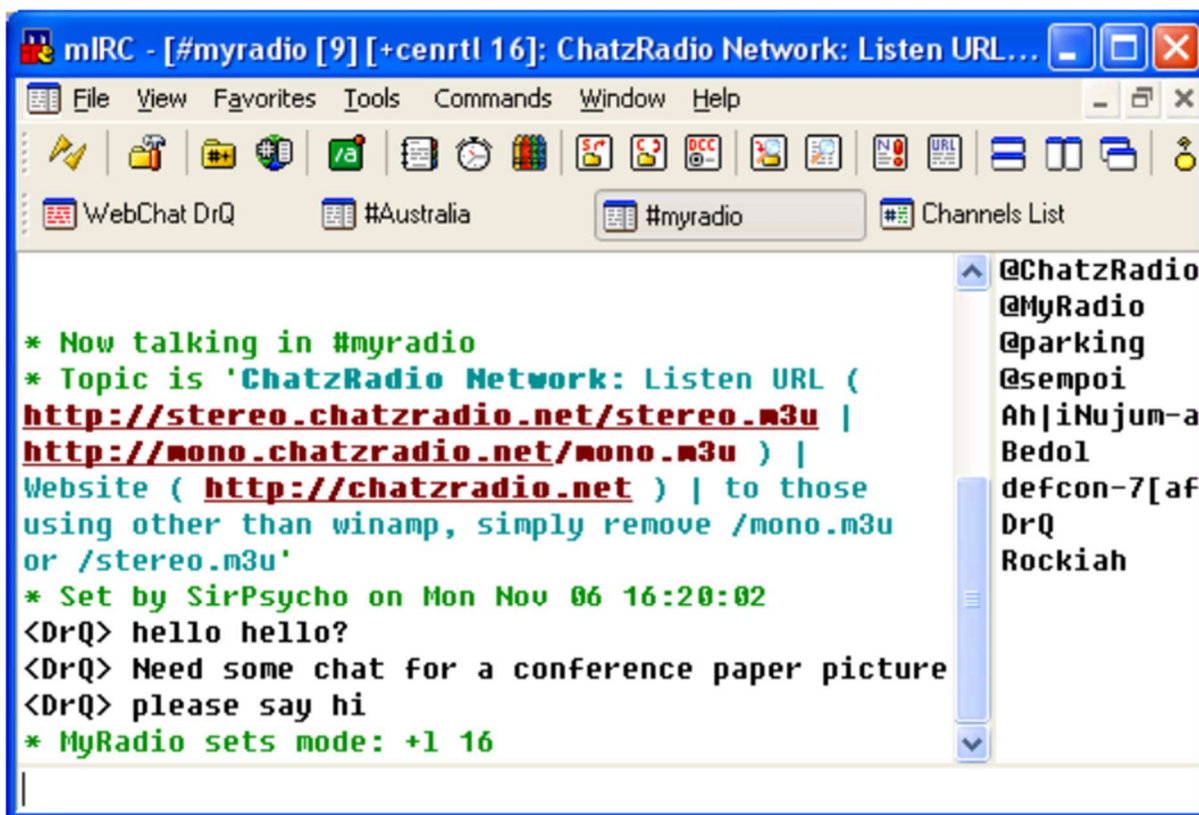


Figure 3. Typical IRC User Interface (MIRC)

Exh-1014.

VI. ORDINARY SKILLED ARTISAN

39. 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

40. 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 Grounds 1, 2, 3, 4, and 5 below.¹

VIII. OFFERED ART

A. Kakuta

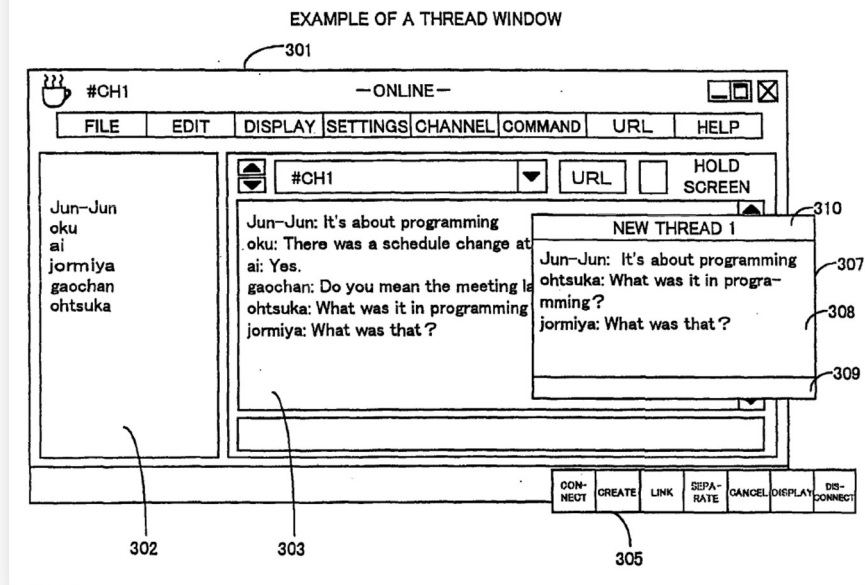
41. U.S. Patent No. 6,630,944 ("Kakuta") describes a device and method designed to enhance the display of conversations within a network-based chat environment, with the primary goal of improving user convenience and communication efficiency. Exh-1005 at Abstract, 1:60–65. Kakuta teaches enabling users to create and manage message groups, or threads, based on their

¹ 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.

specific preferences, either by selecting individual messages or grouping users within a chat session. *Id.* at 3:36–37, 8:43–51. These threads are assigned unique identifiers and are accompanied by related information, such as thread IDs, user members, and authors. *Id.* at 6:14–50, 1:18–23. Kakuta also discloses a display control device that allows these threads to be shown independently in separate windows or alongside other chat messages, depending on user instructions. *Id.* at 1:60–2:14. This flexibility prevents the intermingling of unrelated messages and is particularly useful when multiple topics are being discussed concurrently. *See id.*; *see also id.* at 1:25–59.

42. Furthermore, Kakuta discloses using simultaneous panes, enabling multiple threads to be displayed at once, thus enhancing the user’s ability to track different conversation streams within a single network. *Id.* at 1:60–65, FIG. 7.

Fig. 7



Id. at FIG. 7.

43. Users are provided with various tools to manage these message groups, including the ability to create, link, separate, and cancel threads through a toolbar interface. *Id.* at 8:12–19, FIG.4 (*see* toolbar 305). Kakuta also teaches the facilitation of thread information sharing across the network, enabling other users to access and participate in these threads as needed. *Id.* at 1:60–2:14, 2:30–35.

Kakuta allows users to create new threads in separate panes that relate to a thread from the original messaging pane. *See id.* at 8:38–51, FIG. 7. Overall, Kakuta focuses on user-driven control and sophisticated display mechanisms to promote organized and efficient group-based communication in a chat system. *See id.*

Abstract, 1:25–59, 1:60–65.

B. Matsumoto

44. U.S. Patent No. 7,426,540 (“Matsumoto”) teaches a device and method for allowing a plurality of users to engage in messaging communication in a virtual space as well as to segregate communications into different threads. *See* Exh-1006 at Abstract, 2:38-43. It discloses an IRC system that allows users to create and use channels. 1:17-22, 2:62-3:4. Matsumoto discloses an invention in which the IRC has a plurality of users (clients) that communicate over the internet. *Id.* at 7:37-55. Matsumoto teaches providing channel information, such as a channel name, topic, users participating, and users departed. *Id.* The chat system allows users to employ conditions for filtering and forwarding messages. *Id.* at Claim 1. Overall, Matsumoto focuses on creating channels and correlating messages to be forwarded to additional channels:

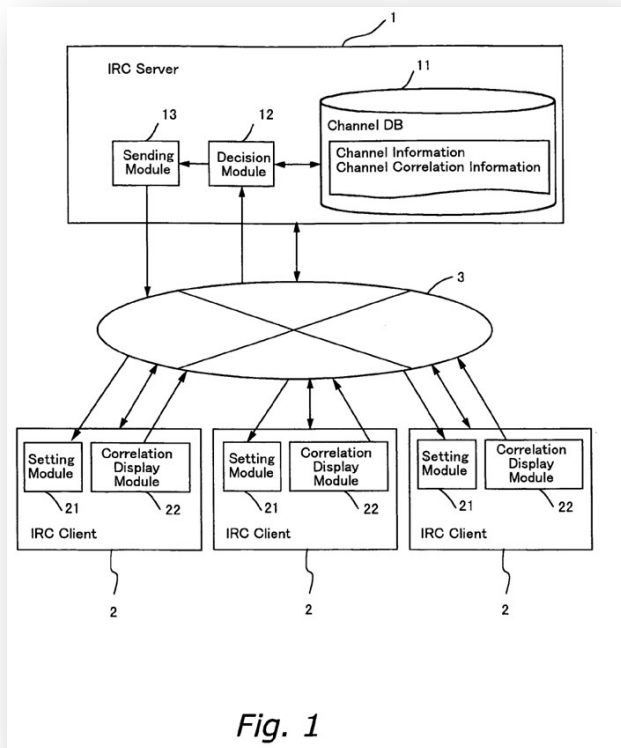


Fig. 1

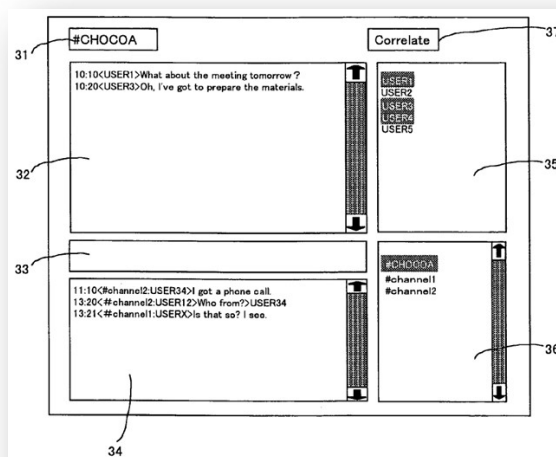
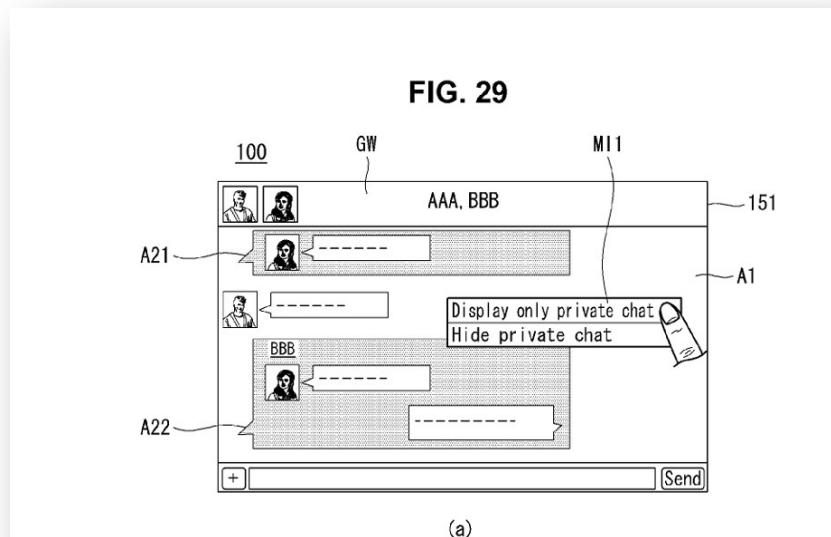


FIG. 3

Id. at FIGS. 1, 3.

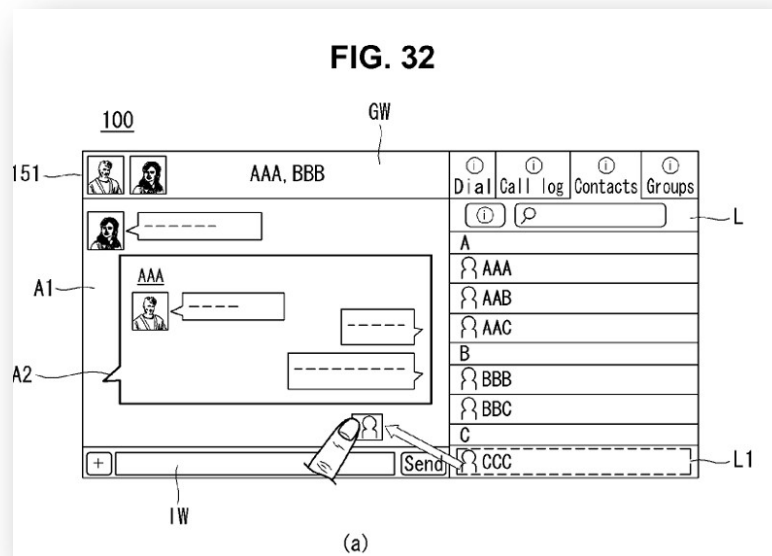
C. Chang

45. U.S. Patent Application Publication No. 2013/0069969 (“Chang”) teaches a device and method for displaying group messages in a main message thread and allowing parties to message in a secondary thread or private window. Exh-1007 at Abstract, [0153]. In Chang, a user can create a private window to message a subset of the users from the main thread. *See id.* at [0174]-[0175]. A user can create a second, separate private window for a different private chat. *Id.* at [0187].



Id. at FIG. 29(a).

46. Chang teaches adding users to a message thread. *Id.* at [0276], FIGS. 31-32.



Id. at FIG. 32(a).

IX. GROUND 1: KAKUTA ANTICIPATES CLAIMS 1-7, 9-12, 15-19, 21-22, 25-27, AND 30

47. A PHOSITA would have understood that Kakuta discloses each and every limitation of Claims 1-7, 9-12, 15-19, 21-22, 25-27, and 30, and therefore anticipates those claims.

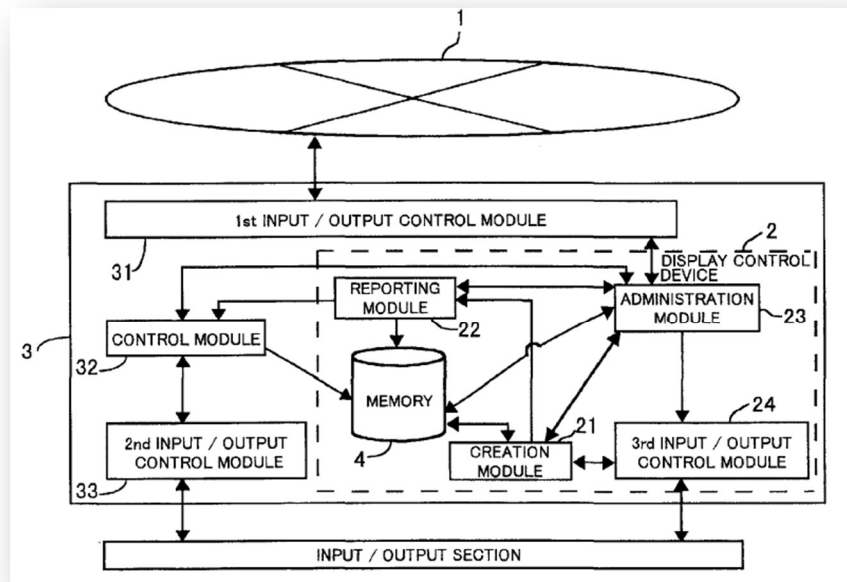
A. Independent Claim 1

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:

48. To the extent that the preamble is limiting, it is my opinion that Kakuta discloses this subject matter. For example, Kakuta discloses an apparatus: a “display control device.” Exh-1005 at *passim*. Kakuta describes “a *display control*

device utilized in a chat device wherein, sharing an identical network mutually, *transmission/reception of text messages is possible*, and presents the *display control device* provided with creating means, reporting means, memory means and input/output control means.” *Id.* at 2:30–35 (emphasis added).

49. Figure 1 from Kakuta depicts an exemplary display control device.



Id. at FIG. 1.

50. Thus, to the extent the preamble is limiting, Kakuta discloses this claim element.

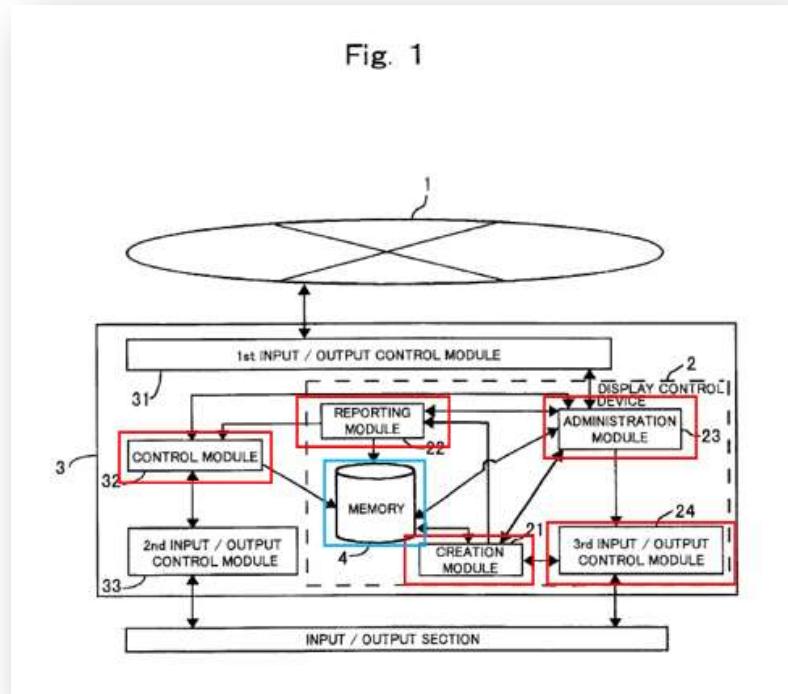
2. **1[a] a processor, and a memory associated with said processor having computer coded instructions therein, with**

**said computer coded instructions configured to, when
executed by said processor, cause the apparatus to:**

51. It is my opinion that Kakuta discloses this limitation. Specifically, Kakuta inherently discloses a processor as it describes a display control program, recorded on a computer-readable recording medium, that executes various processes, thereby requiring the existence of a processor to execute various processes. *Id.* at Claims 10, 20 (claiming “the computer-readable recording medium on which is recorded the display control program for *executing a process* comprising” (emphasis added)); *see also id.* at 5:45–51, 7:39–59, FIG. 14 (illustrating an “output control process”). The display control program manages and coordinates the actions of several modules, including the creation, reporting, and input/output control modules, which interact with memory to handle the display and communication processes—tasks that inherently require a processor. *Id.* at 6:9–13 (“[t]he display control device 2 has a creation module 21, a reporting module 22, a third input/output control module 23, and an administration module 24 as well as the memory 4.”).

52. Kakuta further discloses memory that is inherently associated with a processor, as Kakuta recites that the memory interacts with the display control program and various modules, which process and execute user inputs related to communication and display functions, relying on prewritten computer-coded

instructions stored in memory to handle these tasks. *See id.* Figure 1 illustrates that the memory is directly associated with these modules:



Id. at FIG. 1 (annotations added).

53. The coordination of actions performed by these modules requires that a processor executes the instructions for processing, as Kakuta discloses that these modules exchange instructions. *Id.* at 7:1–3 (“The creation module 21 receives from the administration module 23 *instructions for a process on threads.*” (emphasis added)); *see id.* at 7:31–34; 7:48–51, 11:20–23. It is also inherent that the processor executes computer-coded instructions because Kakuta teaches that

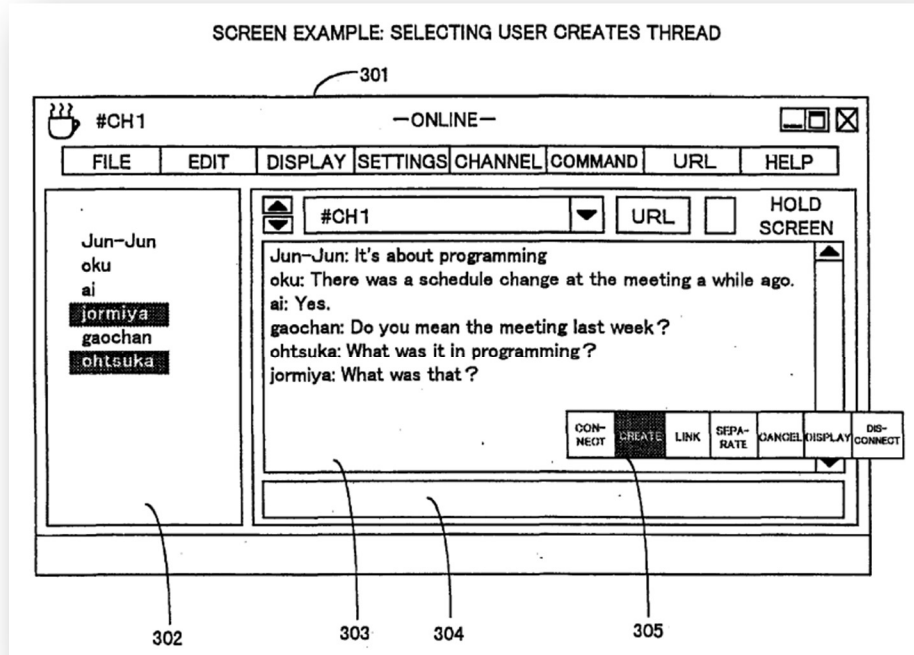
the “display control program” is utilized to execute the steps required for its functioning. *Id.* at 4:20-24; *see also id.* at 4:18-41, Claims 10, 20.

54. Accordingly, a PHOSITA would understand that the instructions processed by the modules, and the information communicated between them, inherently discloses the use of at least one processor to coordinate and execute these activities between Kakuta’s various modules and the device’s memory. Thus, Kakuta discloses this claim element.

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

55. It is my opinion that Kakuta discloses this limitation. Kakuta teaches the use of a “user client device,” a so-called “display control device.” *Id.* at 3:27–29. Specifically, Kakuta discloses that the group-based communication interface will be displayed on the user client device (display control device), which displays transmitted and received text messages from multiple users (e.g., a group-based communication). *Id.* at 2:30-42. Kakuta is replete with examples of the group-based communication that is displayed on the “display control device,” providing numerous illustrations (e.g., FIGS. 4-10) demonstrating numerous users (group-based) involved in communication. *See id.* at 7:60-64 (noting that the following figures, FIGS. 4-12) illustrate the display control device. For instance, Figure 5

depicts an exemplary “group-based communication interface” that is displayed on a user client device (display control device):



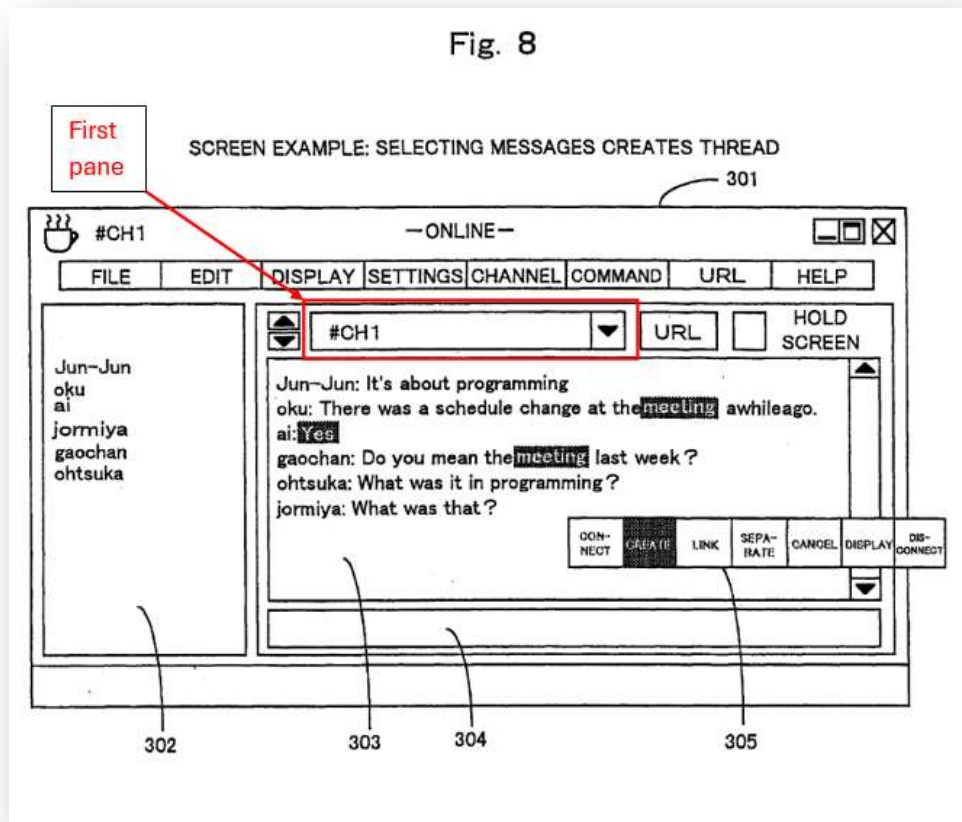
Id. at FIG. 5; *id.* at 7:60-64.

56. It is inherent that there would be a processor having computer coded instructions to perform these actions. Thus, Kakuta discloses this claim element.

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

57. It is my opinion that Kakuta discloses this limitation. Specifically, Kakuta provides a first pane, illustrated below, that displays a channel identifier (CH1).

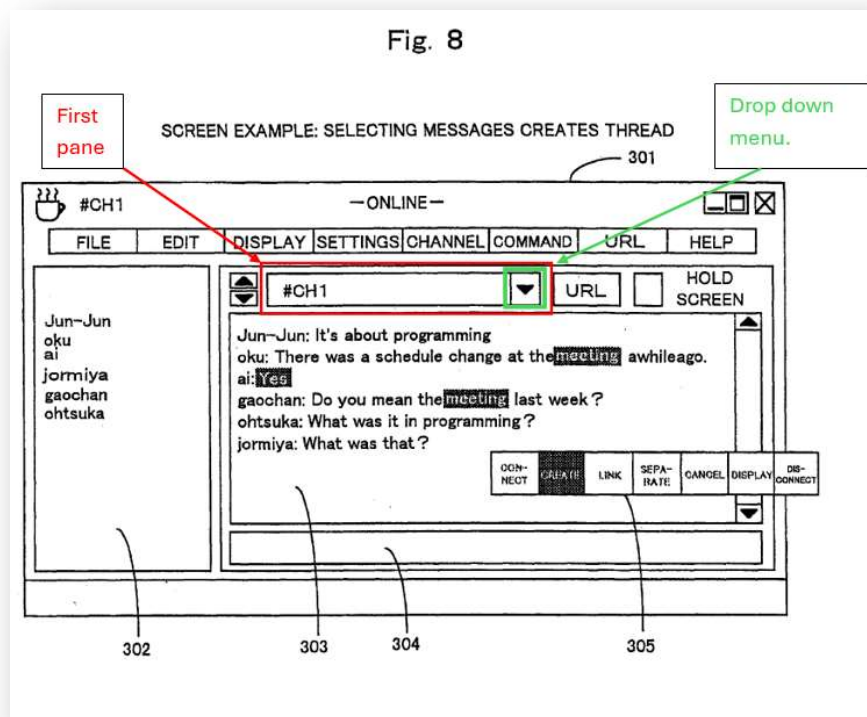


Id. at FIG. 8 (annotations added).

58. Kakuta discloses that a “channel” is a “virtual space that chat clients share in IRC.” *Id.* at 1:18–19. An IRC is “a chat system formed by connecting a chat server with a plurality of chat clients on the Internet, and the plurality of chat

clients sharing the same virtual space, enabling simultaneous conversation.” *Id.* at 1:13–17. Thus, Kakuta provides that CH1 is a channel identifier. *See id.* at 6:28–31 (“FIG. 2 message list is a message list for the channel ‘CH1’. . . The messages in which the message IDs are ‘1,’ ‘5,’ and ‘6’ are included in the thread that is specified with thread ID ‘Th1.’”).

59. The first pane is configured to display a plurality of channel identifiers because pane 1, the channel identifier field, has a drop-down menu indicating that there is more than one channel identifier that can be chosen.



Id. at FIG. 8 (annotations added). Furthermore, a PHOSITA would understand that Kakuta’s drop-down menu would be needed to allow the user to choose between

multiple channels, not least based on Kakuta's statement that "in IRC creating channels that differ according to topic is easy." *Id.* at 1:57-58. A PHOSITA would also understand that the drop-down would necessarily list different channels. It was well known in the art that a drop-down menu, such as disclosed in Kakuta, would necessarily expand when clicked/activated to display a larger list of items/options. *See, e.g.*, Exh-1012 at 52-53, 549-51 (discussing combo boxes).

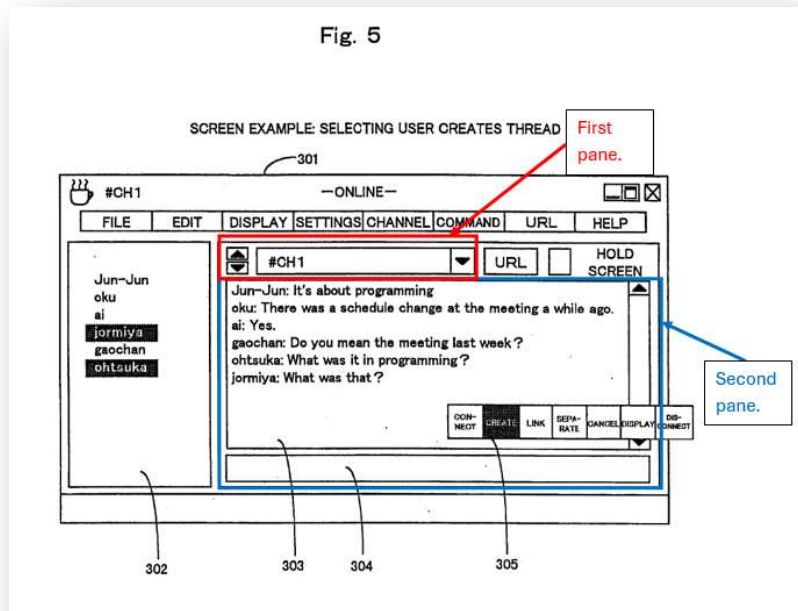
60. Finally, it is clear that each channel is associated with a group of members who are users of the system. Kakuta discloses that each channel (groups of users) exchange messages among a network (the system). *Id.* at 2:4-9 ("(A) correlating messages *on the network* based on user instructions and creating *message groups* and predetermined message group information relating to the message groups; (B) sharing the created *message group* information with *users on the network*;" (emphasis added)); 2:36-41; Claim 1.

61. It is inherent that there would be a processor having computer coded instructions to perform these actions. Thus, Kakuta discloses this claim element.

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,**

62. It is my opinion that Kakuta discloses this limitation. Specifically, Kakuta teaches a second pane that displays the messaging communications associated with the selected channel identifier:

Fig. 5



Id. at FIG. 5 (annotations added indicating the first and second panes).

63. Kakuta teaches that the messaging communications in the second pane are linked to the group-based communications associated with a specific channel, which is selected from a plurality of available channel identifiers. For instance, Kakuta teaches that when the channel is selected, only the messages for that channel are displayed. *Id.* at 6:28-33 (“The FIG. 2 message list is a message list for the channel ‘CH1’.”).

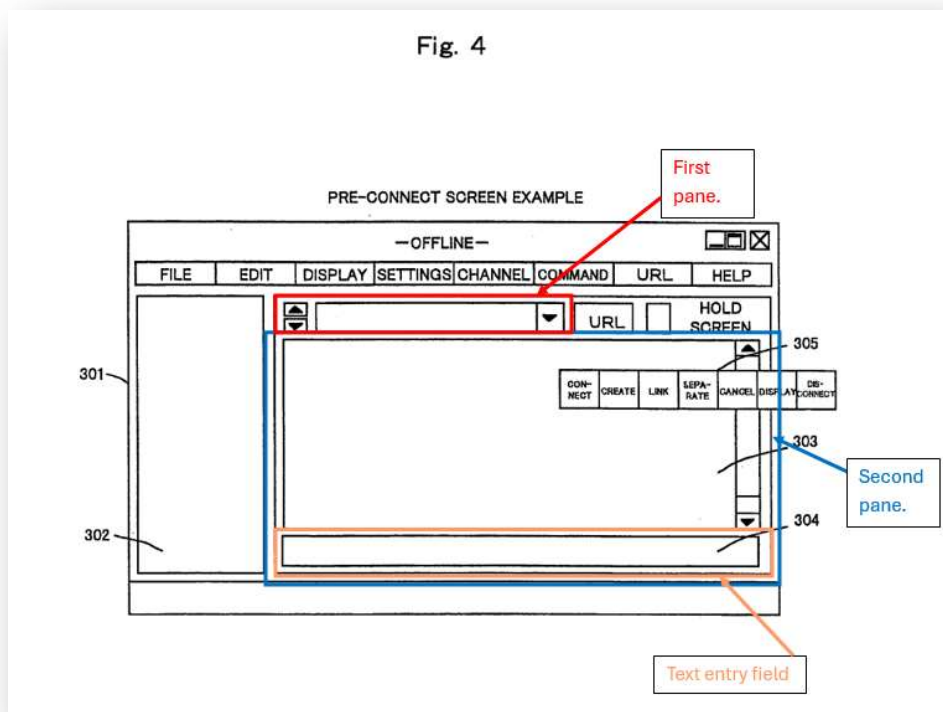
64. As illustrated above, Figure 5 exemplifies this “second pane” concept by illustrating how message groups, identified by specific group information (such as CH1, user nicknames, group IDs, and other identifiers), are displayed.

65. It is inherent that there would be a processor having computer coded instructions to perform these actions. Thus, Kakuta discloses this claim element.

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,**

66. It is my opinion that Kakuta discloses this limitation. Specifically, Kakuta teaches a text entry field (304) that is user operable to generate communications in the second pane. In particular, Kakuta provides “[a] main screen 301, a user window 302, and chat window 303, and message input field 304,” and the illustrations show that the text entry field (message input field 304) is displayed on the screen and corresponds to the “second pane.” *Id.* at 7:66–8:1, FIG. 4.

Fig. 4



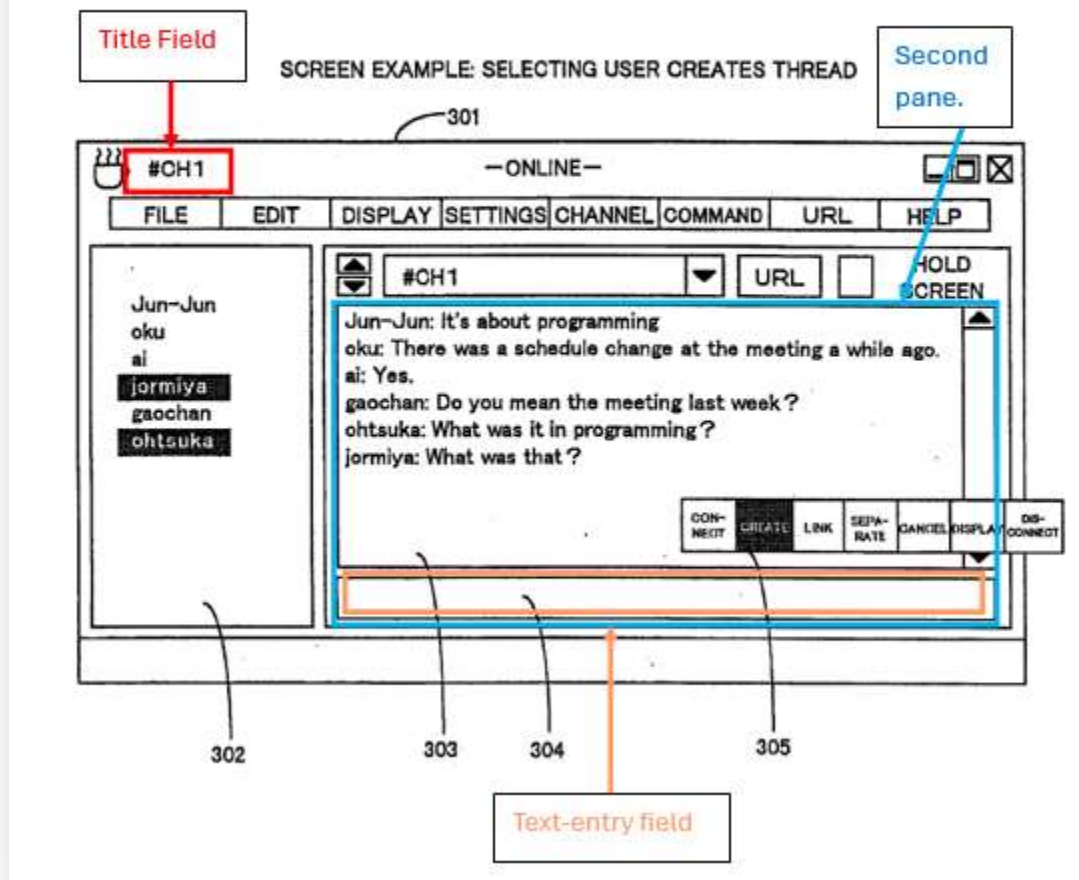
Id. at FIG. 4 (annotations added).

67. Kakuta explains that the text entered in the text entry field is user operable to generate communication in the second pane, explaining that “in one aspect the present invention is a display control method utilized in a chat system in which users on information terminals share identical networks mutually, enabling text conversation.” *Id.* at 1:66–2:3. The method involves “correlating messages on the network based on user instructions and creating message groups,” as well as “displaying the message groups independently of messages on the network” according to user instructions. *Id.* at 2:4–14. This aligns with the functionality of displaying group-based communications in a dedicated pane with an associated

text entry field. Furthermore, Kakuta states that the screen layout, including the text entry field (304) is “likewise as with general IRC clients,” meaning a familiar structure for managing and displaying communications within group-based channels. *See id.* at 7:66–8:3; *id.* at 2:15–29.

68. Kakuta further teaches a title field displaying information identifying said selected one of said plurality of group-based communication channels. *Id.* at 8:30–37. Figure 5 illustrates this claim element, depicting an exemplary “channel text entry field” (304) that is associated with the second pane and displaying a title field:

Fig. 5



Id. at FIG. 5 (annotations added).

69. It is inherent that there would be a processor having computer coded instructions to perform these actions. Thus, Kakuta discloses this claim element.

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;

70. It is my opinion that Kakuta discloses this limitation. Specifically, Kakuta teaches that the second pane will receive a first message communication associated with the selected channel identifier. Kakuta teaches that the “main screen 301, a user window 302, and chat window 303, and *message input field 304* are displayed in the FIG. 4 screen. *These windows are likewise as with general IRC clients; therefore explanation is omitted.*” *Id.* 7:66-8:3 (emphasis added). A PHOSITA would be familiar with the functioning of the message input field 304 for receiving a first messaging communication in a group-based communication channel because this was well known in typical IRC user interfaces such as MIRC, shown below (which includes a main chat window and a text input field for group communications at the bottom).

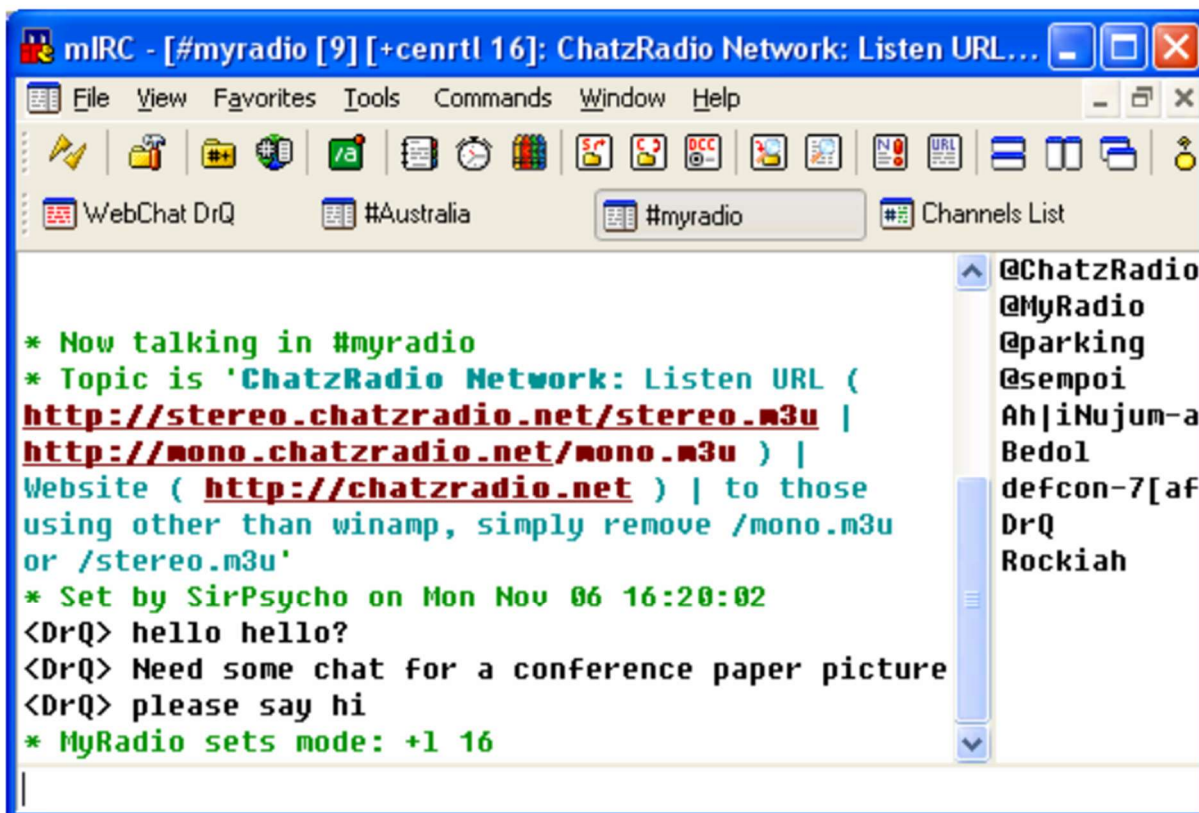


Figure 3. Typical IRC User Interface (MIRC)

Exh-1014.

71. Kakuta also teaches that messages are associated with a channel (CH1); messages are given a message ID; and the message ID determines whether a message is displayed in a particular message thread. *Id.* at 6:23-34. This is illustrated in Figure 2, which discloses a first message (message ID 1):

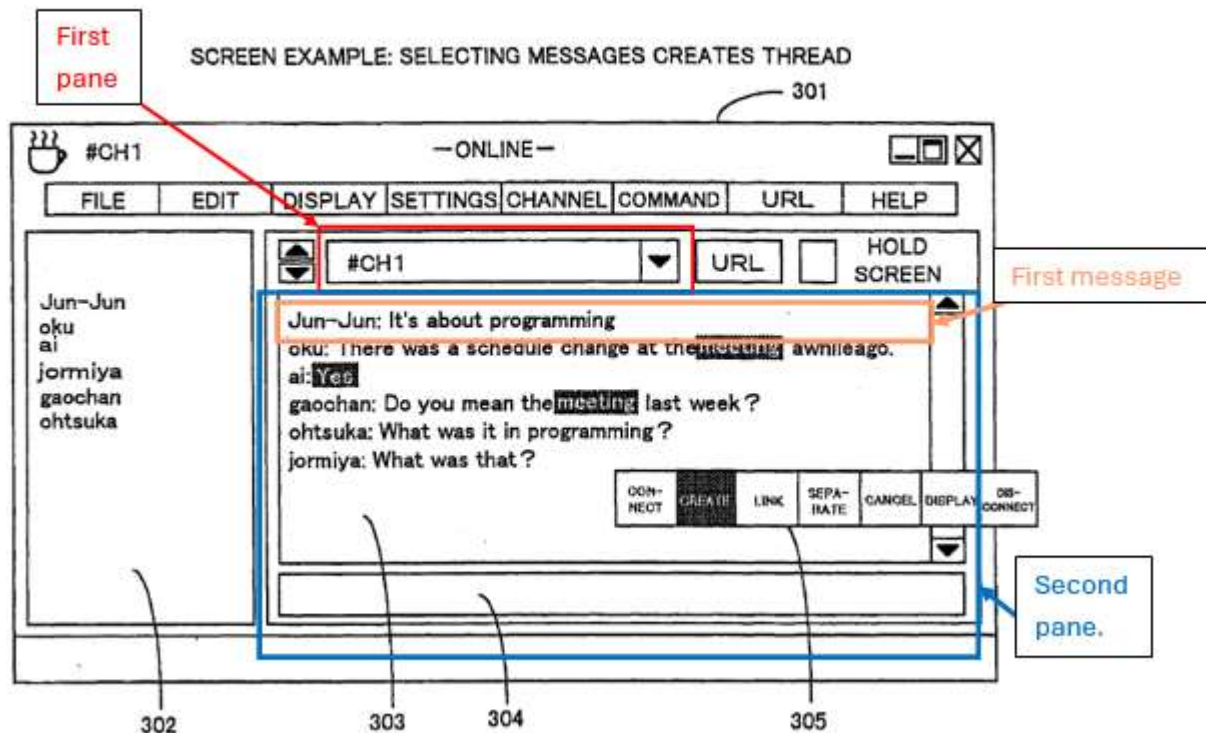
MESSAGE LIST

CHANNEL	Th. ID	MESSAGE ID	MESSAGES
CH-1	Th1	1	about programming ...
	Th2	2	the recent meeting ...
	Th2	3	yes
	Th2	4	meeting
	Th1	5	what in programming ...
	Th1	6	what was that ?
	⋮	⋮	⋮

Id. at FIG. 2 (annotations added).

72. As further illustrated in Kakuta, this first message is displayed in the second pane between members of the group (e.g., Jun-Jun, oku, ai, goachan, etc.) associated with the channel (CH1):

Fig. 8



Id. at FIG. 8 (annotations added).

73. I note that the first message in Figure 2 appears to be the same first message in Figure 8 as both first messages provide “about programming.”

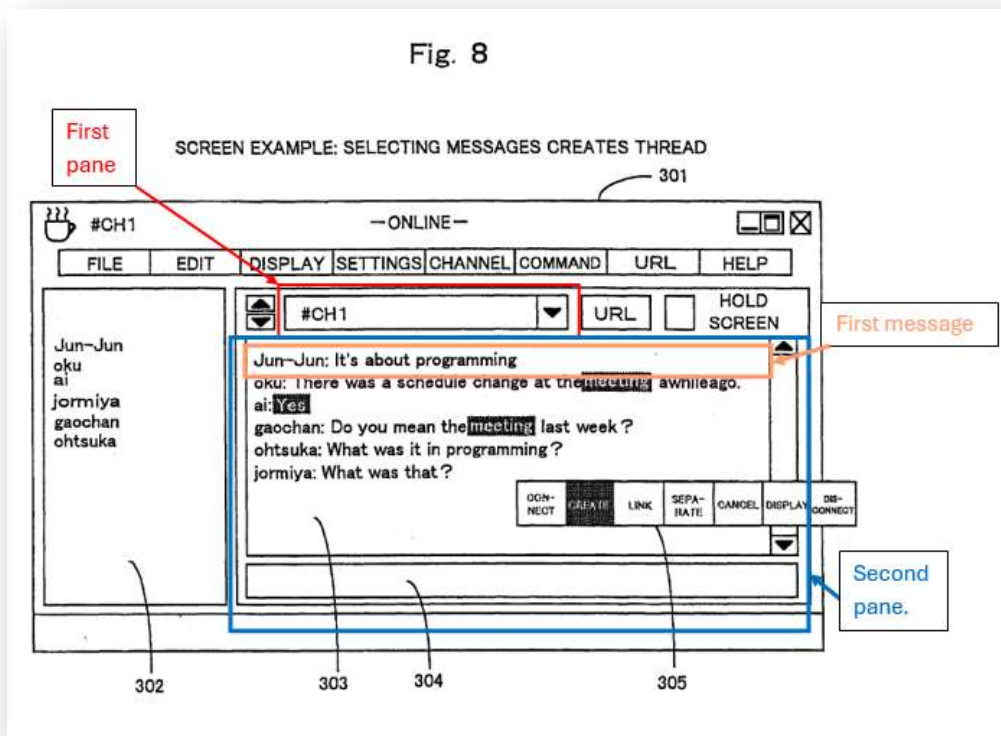
74. It is inherent that there would be a processor having computer coded instructions to perform these actions. Thus, Kakuta discloses this claim element.

8. 1[g] display said first messaging communication within said second pane;

75. It is my opinion that Kakuta discloses this limitation. Specifically, Kakuta teaches that the first messaging communication will be displayed in the second pane. Kakuta describes a display control device that “correlates messages

within the network based on selection of the chat device from a user, and creates message groups out of messages from the selected chat devices and message group information containing information that designates the selected chat devices.” *Id.* at 3:25–31. This indicates that the display control device is capable of displaying the correlated messages within a designated display area, which aligns with the functionality of displaying the first messaging communication within a second pane as claimed.

76. Figure 8 illustrates an exemplary “second pane” displaying a “first communication message.”



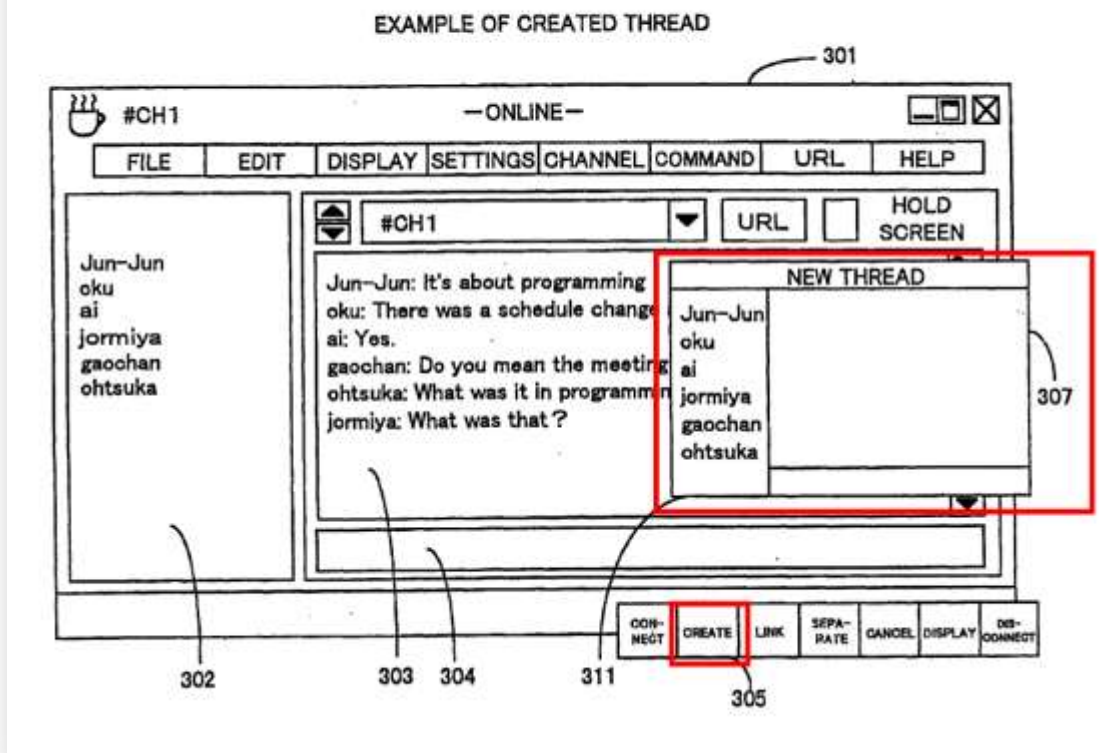
Id. at FIG. 8 (annotations added).

77. It is inherent that there would be a processor having computer coded instructions to perform these actions. Thus, Kakuta discloses this claim element.

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

78. It is my opinion that Kakuta discloses this limitation. Kakuta teaches displaying a first user-selectable control associated with the first messaging communication. In particular, Kakuta describes a floating “toolbar 305” comprised of various tools (i.e., “user-selectable controls”), such as “Create,” “Display,” “Link,” “Separate,” “Connect,” “Cancel,” and “Disconnect,” which are available in isolation or may be used in conjunction with the selection of other messaging communications and/or user IDs. *Id.* at FIG. 4, 8:30–58. “For example, wherein ‘Create’ is pressed without making any selection, as shown in FIG. 9 a new thread window 307 is simply displayed with no message. Displaying a list of users in the channel by displaying a user list 311, shown in FIG. 9 in the new thread window, is desirable.” *Id.* at 8:53–58.

Fig. 9

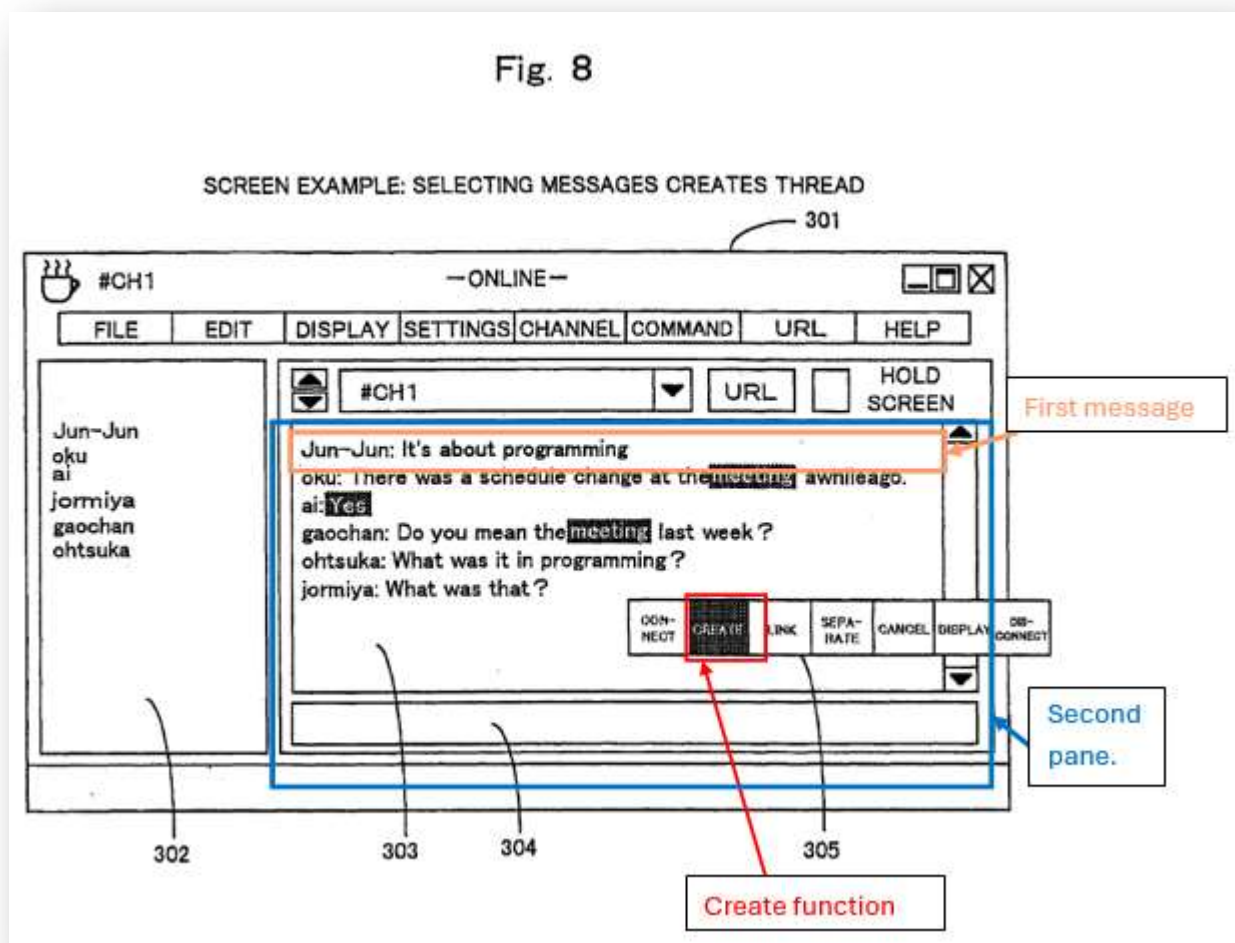


Id. at FIG. 9 (annotations added).

79. Furthermore, the first user selectable control (Create) can be linked or associated with the first messaging communication allowing the user to select a message to associate with a newly created thread. *Id.* at 8:45–47. Kakuta discloses that if the first message is selected in conjunction with the create function from the toolbar, and the user confirms the selection of the first message (by clicking OK on a confirmation screen), then the first message will appear in the new thread. *See id.* at 12:15-25, 12:36-39. Kakuta teaches that “wherein a *thread is created not by*

selecting users, but by selecting messages, is shown in FIG. 8.” *Id.* at 8:43-45 (emphasis added).

80. Figure 8 illustrates the use of a “first user-selectable control” (Create) among the toolbar (305) that is associated with a first communication message (i.e., highlighted selected messages).

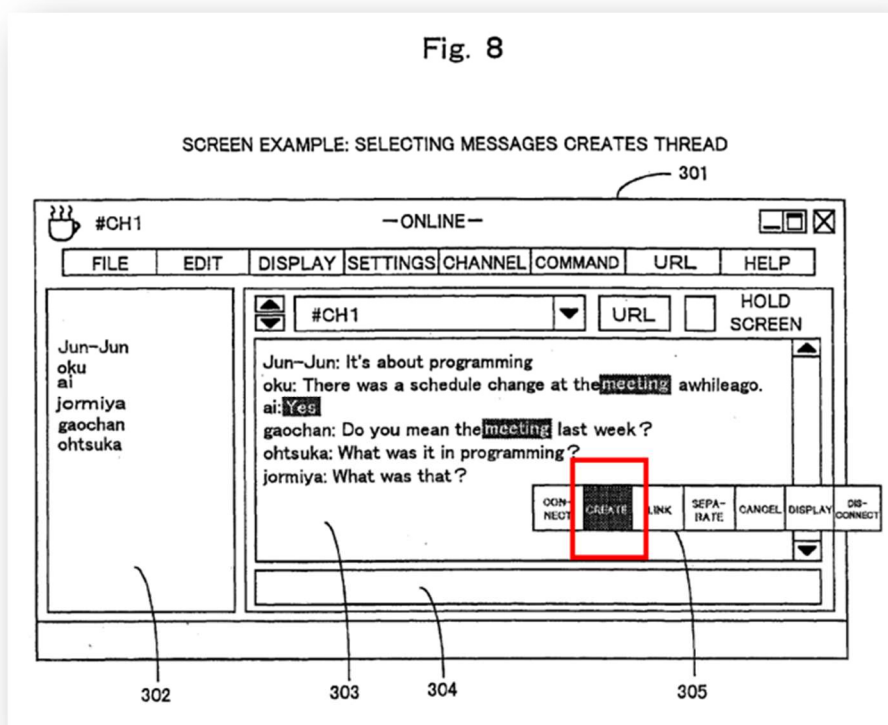


Id. at FIG. 8 (annotations added).

81. It is inherent that there would be a processor having computer coded instructions to perform these actions. Thus, Kakuta discloses this claim element.

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;

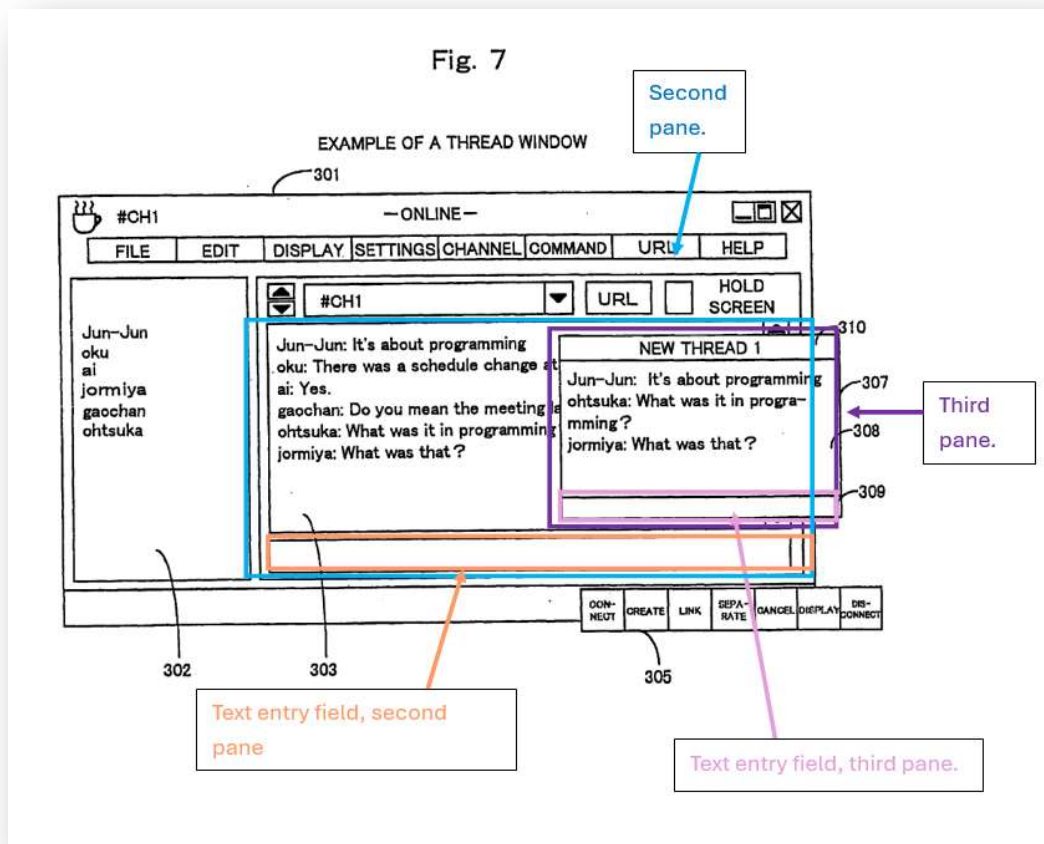
82. It is my opinion that Kakuta discloses this limitation. Kakuta teaches that when a user selects the “Create” user-selectable control and selects the first message (as described above in Section IX.A.9), a third pane will be displayed: “FIG. 8 depicts the situation in which a thread is created by selecting messages as a whole, or words included in messages.” Exh-1005 at 8:45–47.



Id. at FIG. 8 (annotations added).

83. In response to the user's selection of "Create" (i.e., the first user-selectable control), a thread window 307 is generated, displaying user messages in a message window 308, with an associated input field 309 for additional messaging communication. *Id.* at 8:30–37. This thread window acts as a "third pane" where messages are displayed separately from the main chat window. *Id.*

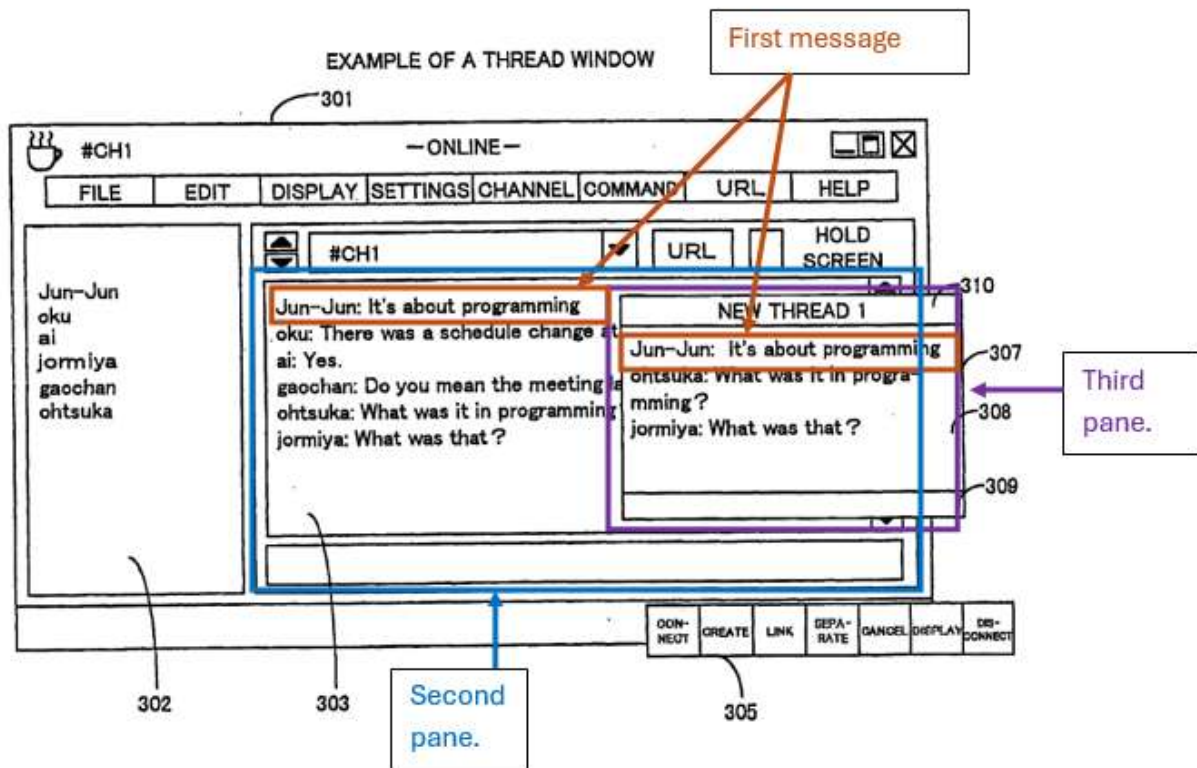
84. Kakuta further teaches that this "third pane" will have an associated sidebar text-entry field operable to receive user input, distinct from the channel text-entry field of the second pane, as depicted in Figure 7. Specifically, Kakuta discloses that "[t]hread window 307 includes message window 308, ***input field 309***, and title field 310. User messages composing the thread are displayed in the message window 308. ***Messages for the thread can be input in the input field 310.***" *Id.* at 8:31-33 (emphasis added). (I understand the final reference to 310 to mistakenly refer to the title field 310 instead of the input field 309).



Id. at FIG. 7 (annotations added).

85. Additionally, Kakuta teaches that the first messaging communication from the second pane will be displayed in the third pane, as illustrated in Figure 7:

Fig. 7



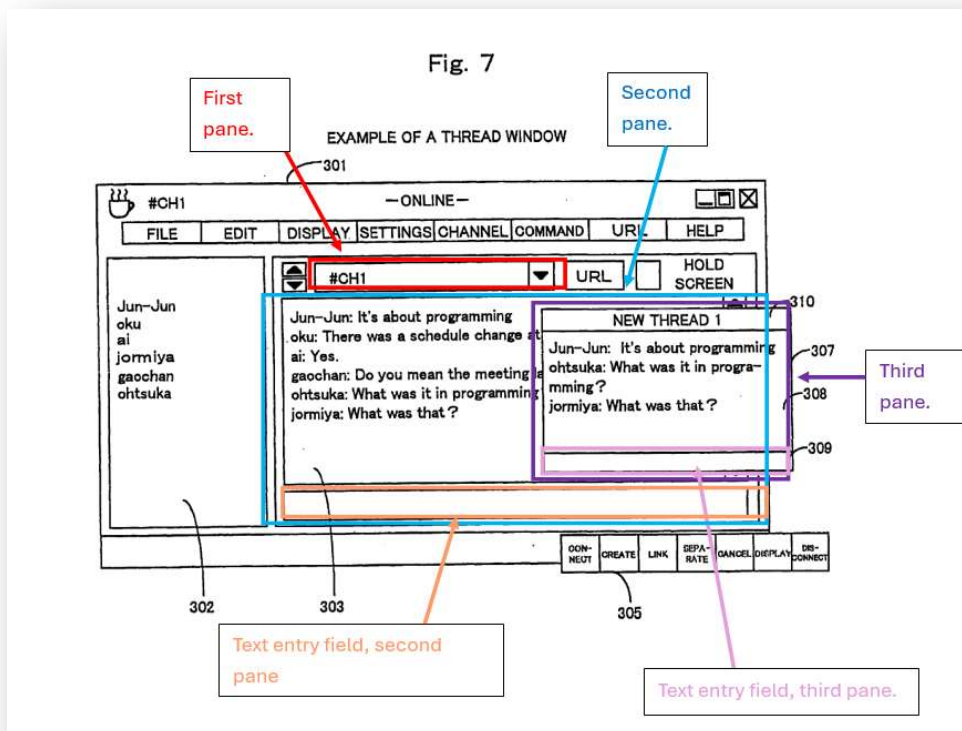
Id. at FIG. 7 (annotations added).

86. It is inherent that there would be a processor having computer coded instructions to perform these actions. Thus, Kakuta discloses this claim element.

11. 1[j] 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

87. It is my opinion that Kakuta discloses this limitation. Kakuta provides that the third pane with a text-entry field will be displayed simultaneously with the

first pane and with the second pane and the second pane's text entry field. This is illustrated in Figure 7:



Id. at FIG. 7 (annotations added).

88. Kakuta further describes an input/output control means that allows for message groups to be displayed in a window separate from the channel messages, while also providing the option to display both channel messages and message groups together within the same window. *Id.* at 2:63–3:2. This capability discloses the claimed functionality of displaying a third pane and sidebar text-entry field simultaneously with the first pane, second pane, and channel text-entry field. *See id.* at 1:62–65 (“The object of the present invention is to display topics respectively

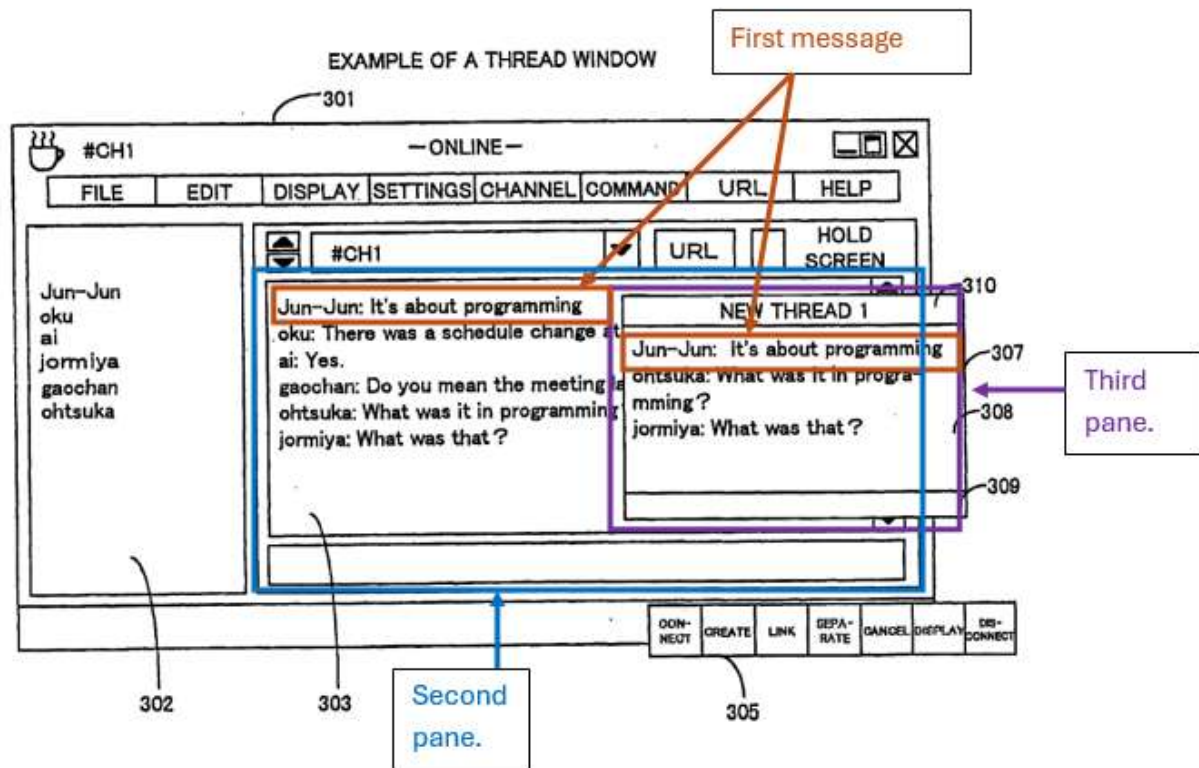
segregated from other topics wherein a plurality of topics are under way simultaneously on a network, to promote accurate and efficient communication.”).

89. It is inherent that there would be a processor having computer coded instructions to perform these actions. Thus, Kakuta discloses this claim element.

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

90. It is my opinion that Kakuta discloses this limitation. Kakuta illustrates a first messaging communication being displayed within said third pane and said second pane simultaneously:

Fig. 7



Id. at FIG. 7 (annotations added).

91. Kakuta further describes an input/output control means that allows message groups to be displayed in a separate window from the channel messages, while also permitting the simultaneous display of both channel messages and message groups within the same window. *Id.* at 2:63–3:2. This demonstrates the capability of displaying the same messaging communication in both the third pane and the second pane simultaneously, consistent with the claimed functionality. *See id.* at 1:62–65.

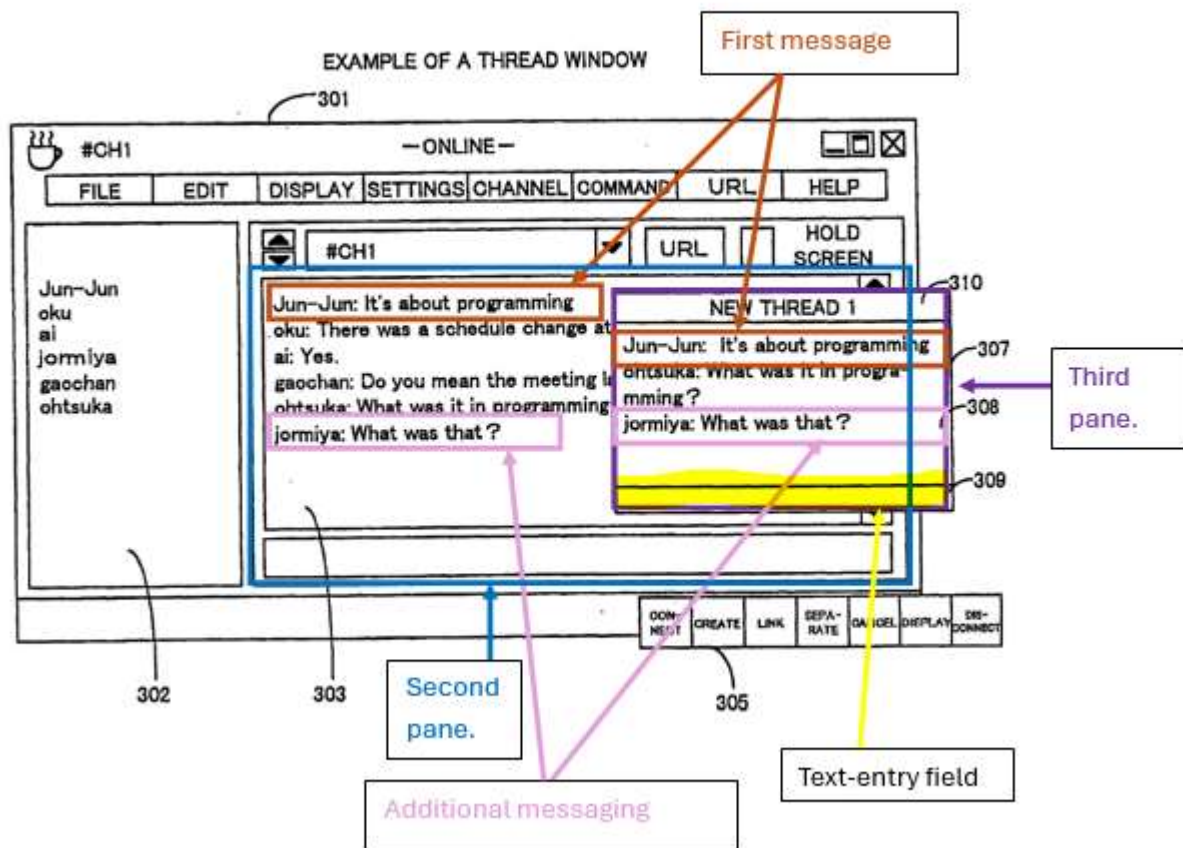
92. It is inherent that there would be a processor having computer coded instructions to perform these actions. Thus, Kakuta discloses this claim element.

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

93. It is my opinion that Kakuta discloses this limitation. Specifically, Kakuta describes a thread window 307 that includes a message window 308 and an input field 309, which is clearly intended to receive user input for additional messaging communications. *Id.* at 8:30–33. “User messages composing the thread are displayed in the message window 308. ***Messages for the thread can be input in the input field....***” *Id.* at 8:33–35 (emphasis added); *see also id.* at Step 1 of FIG. 13, 9:42–44. This demonstrates the functionality of receiving user input in a designated text-entry field, consistent with the claimed sidebar text-entry field.

94. Figure 7 illustrates an exemplary third pane that may receive user input of an additional messaging communication within the sidebar text-entry field.

Fig. 7



Id. at FIG. 7 (annotations added).

95. It is inherent that there would be a processor having computer coded instructions to perform these actions. Thus, Kakuta discloses this claim element.

14. 1[m] after receipt of said user input: transmit said additional messaging communication, via a network, to at

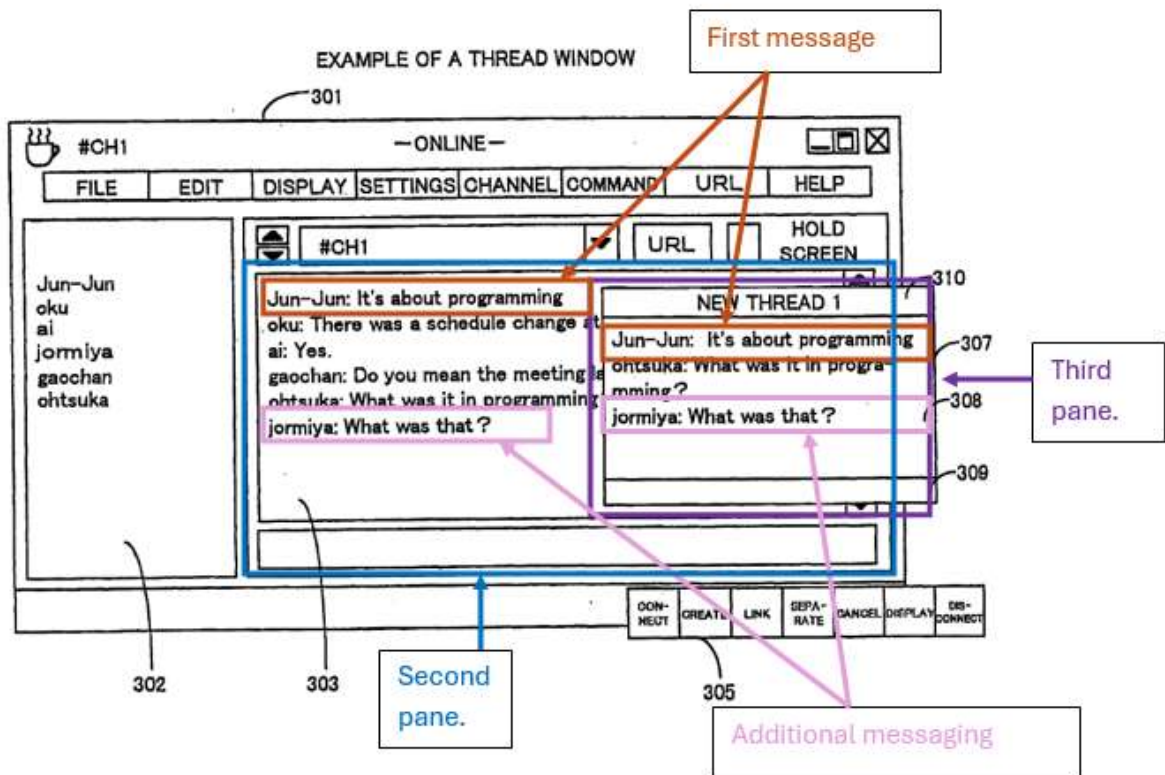
least one member of the group associated with said selected group-based communication channel and

96. It is my opinion that Kakuta discloses this limitation. Specifically, Kakuta describes a system where user input, such as messages composed in an input field (e.g., input field 309 in thread window 307), is transmitted as part of a thread or message group to designated users. *Id.* at 8:30–33. This is done in accordance with thread-forming instructions from users, and the resulting thread information, including the messages, is created and stored. *Id.* at 8:30–37. *See also id.* at Step 2-3 of FIG. 13, 9:44-53; Step 11 of FIG. 14, 10:3-5.

97. Additionally, the system allows for the creation of threads based on user selections, which are then communicated to the relevant users within the network, thereby fulfilling the claimed functionality of transmitting the additional messaging via a network to at least one member of the group associated with the selected communication channel. *Id.* at 8:43–51; *see also id.* at claim 1 (“display method utilized in a chat system in which users on information terminals share a network, enabling text conversation between the users in a chat session,”).

98. Figure 7 illustrates an exemplary interface that enables transmission of an additional messaging communication, via a network, to at least one member of the group associated with said selected group-based communication channel.

Fig. 7



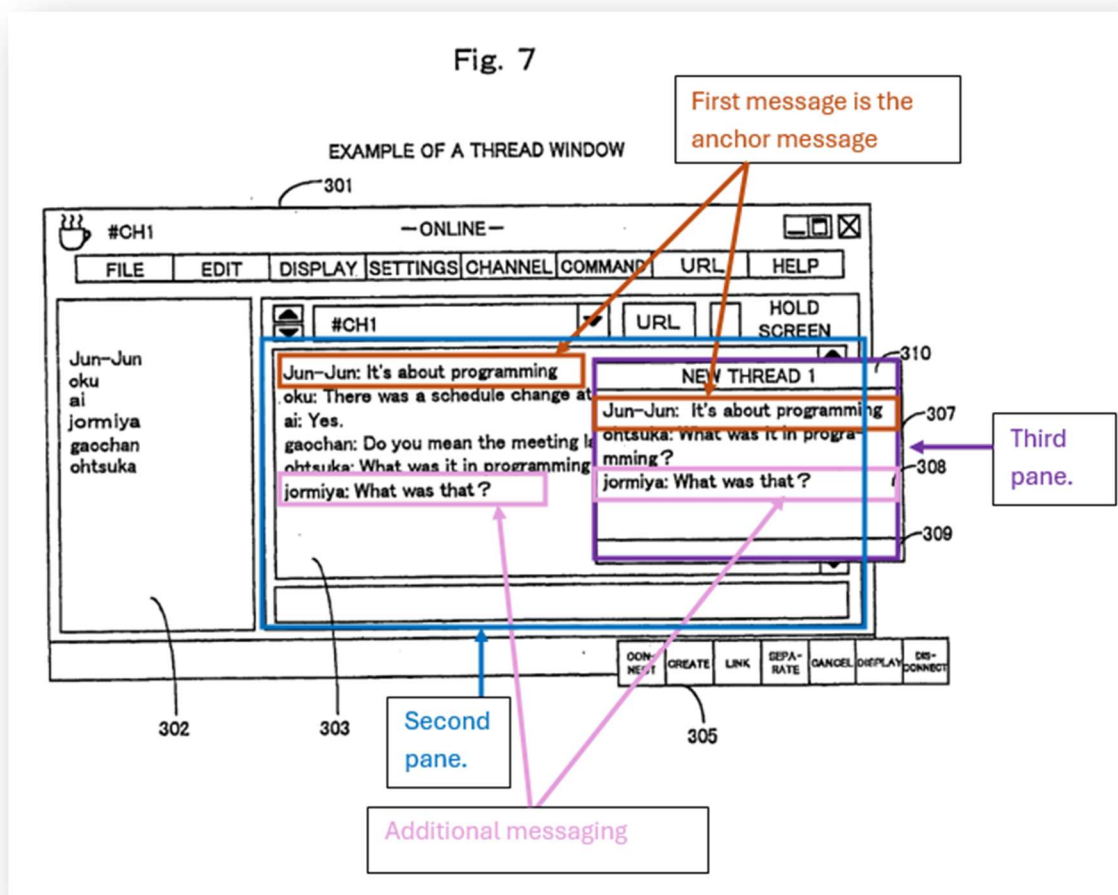
Id. at FIG. 7 (annotations added).

99. It is inherent that there would be a processor having computer coded instructions to perform these actions. Thus, Kakuta discloses this claim element.

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;

100. It is my opinion that Kakuta discloses this limitation. Specifically, Kakuta teaches that the first messaging communication of both pane two and pane three is the anchor message of pane three. This is illustrated in Figure 7:



Id. at FIG. 7 (annotations added).

101. Kakuta further describes methods and devices for displaying conversations on a network, where threads are created from user instructions and remarks. *Id.* at Abstract. These threads, composed of user messages, are stored and

displayed in a thread window. *Id.* at 8:30–33. The thread window (307) includes a message window (308) where the messages comprising the thread are displayed. *Id.* at 8:30–37. The system of Kakuta is capable of displaying a communication thread in a pane, where the first messaging communication can serve as the anchor message, with additional messaging communications being part of the same thread, fulfilling the claimed functionality. *Id.* at Abstract (“The created thread information is reported to other users in the network, and is in common with thread information within the network. Remarks within a thread may be displayed in a thread window 307 only, or displayed in both it and a conversation window 303, configurable to suit according to user instructions.”). *See also id.* at Step 15-16 of FIG. 14, 10:20-30, 10:38-42.

102. Additionally, Figure 2 teaches the use of an “anchor message” among threads where the “Message ID” is listed as “1” for a particular “Th. ID”:

MESSAGE LIST			
CHANNEL	Th. ID	MESSAGE ID	MESSAGES
CH-1	Th1	1	about programming ...
	Th2	2	the recent meeting ...
	Th2	3	yes
	Th2	4	meeting
	Th1	5	what in programming ...
	Th1	6	what was that ?
	⋮	⋮	⋮

Id. at FIG. 2 (annotations added).

103. It is also inherent that there would be a processor having computer coded instructions to perform these actions. Thus, Kakuta discloses this claim element.

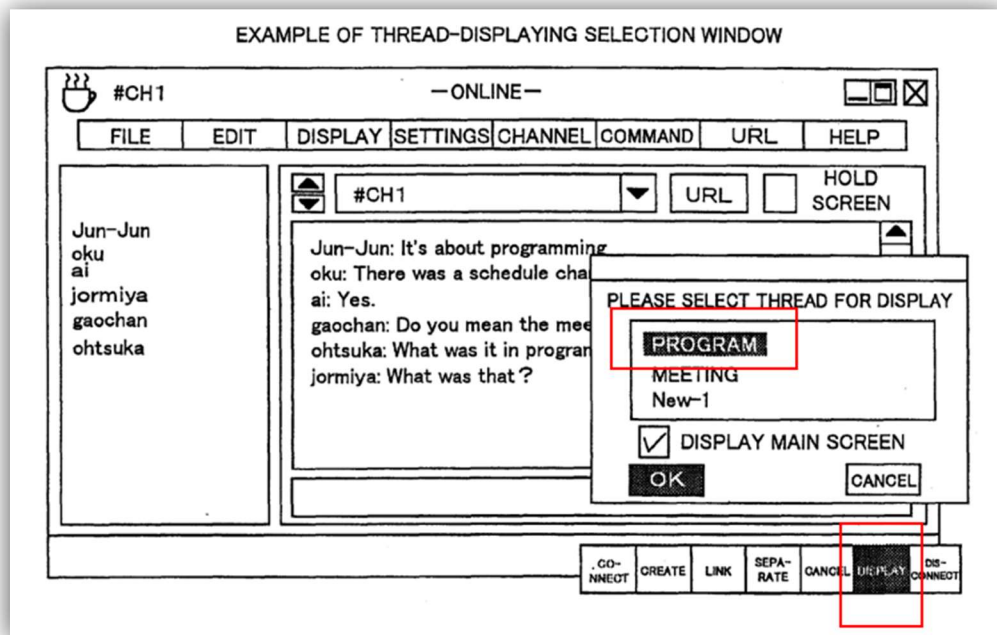
16. **1[o] display a second user-selectable control associated with said first messaging communication in said second pane, said second user-selectable control being associated with an indication that said first messaging communication is an anchor message of a subsidiary communication thread, and being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

104. It is my opinion that Kakuta discloses this limitation. Kakuta teaches the use of a “Display” which is a user selectable control that can be associated with the first messaging communication in the second pane and the anchor message in

the third pane. In particular, Kakuta describes a floating “toolbar 305” comprising of various tools (i.e., “user-selectable controls”), such as “Create,” “Display,” “Link,” “Separate,” “Connect,” “Cancel,” and “Disconnect,” which are available in isolation or may be used in conjunction with the selection of other messaging communications and/or user IDs. *Id.* at FIG. 4, 8:30–58. The “second user-selectable control” is the “Display” tool, which is associated with a first messaging communication in the second pane, enabling the user to select a specific thread to be shown within the subsidiary communication thread (i.e., the third pane). *Id.* at 9:23–31, FIGS. 12, 16 and 19.² The first message is then displayed as an anchor message within this subsidiary communication thread. *Id.* at 9:23–31 (“FIG. 12 illustrates an example of a selection window displaying the situation wherein ‘Display’ has been clicked on the toolbar. A list of created thread titles is displayed in the selection window. When any of the threads is selected and the ‘OK’ button is pressed, the selected thread window is displayed.”), FIG.7; *see also id.* at 14:51–61, 12:50–61, 15:1–5, FIGS. 16 and 19.

² I note that the step for displaying a thread in the creation process (S357) has similar description as displaying thread in the display process (S434), so the message output in the third pane should be the same. Exh. 1005 at 12:50-54, 15:1-5, FIGS. 16, 19).

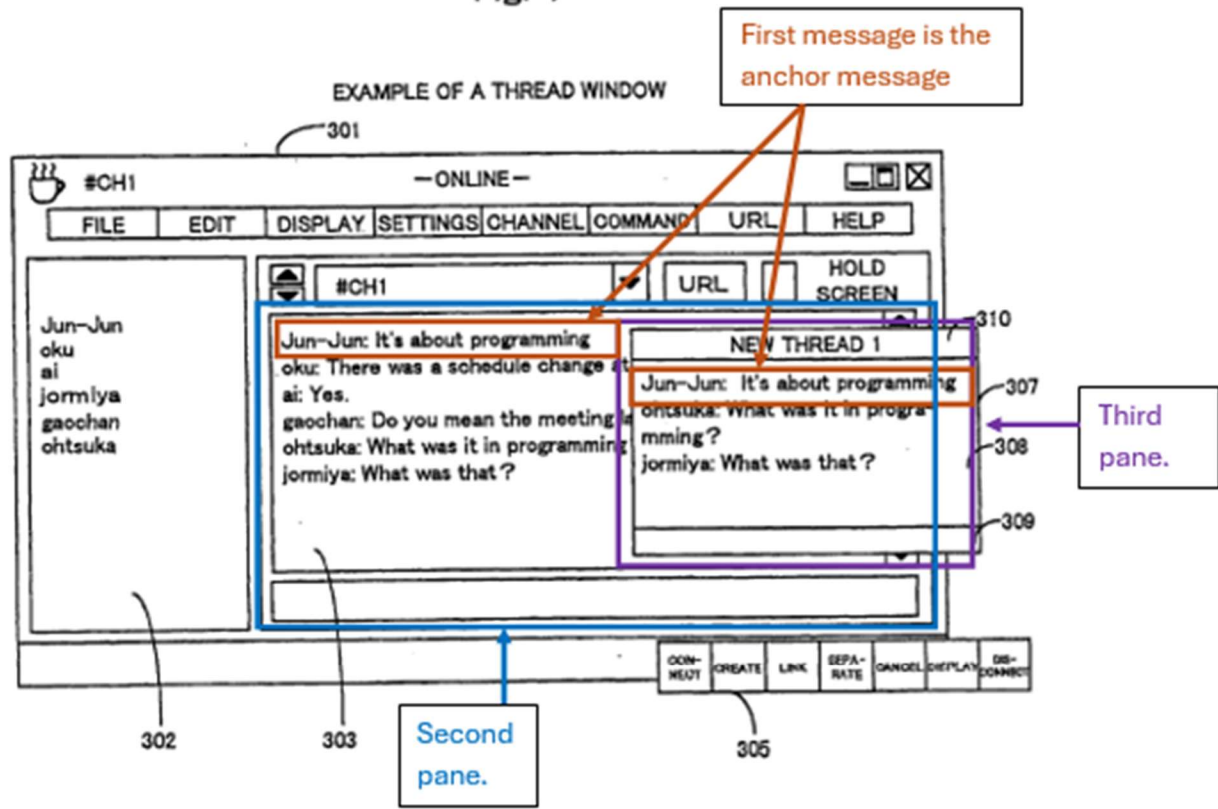
105. Figure 12 illustrates the “Display” tool being invoked to show a particular “Program” thread within the third pane, representing the subsidiary communication thread.



Id. at FIG. 12 (annotations added demonstrating the selection of the “Display” tool and the “Program” thread for display within the third pane).

106. Figure 7 illustrates the third pane displaying the first communication message as the anchor message within the subsidiary thread. The first communication message is indicated as an anchor message because it is presented as the first (i.e., top-most) message within the thread:

Fig. 7



Id. at FIG. 7 (annotations added). Alternatively, Figure 12 of Kakuta illustrates that the second user-selectable control is associated with an indication that the first messaging communication is the anchor message of a subsidiary communication thread, as the thread selection labeled “Program” corresponds to the first communication message discussing “programming,” which also serves as the anchor message.

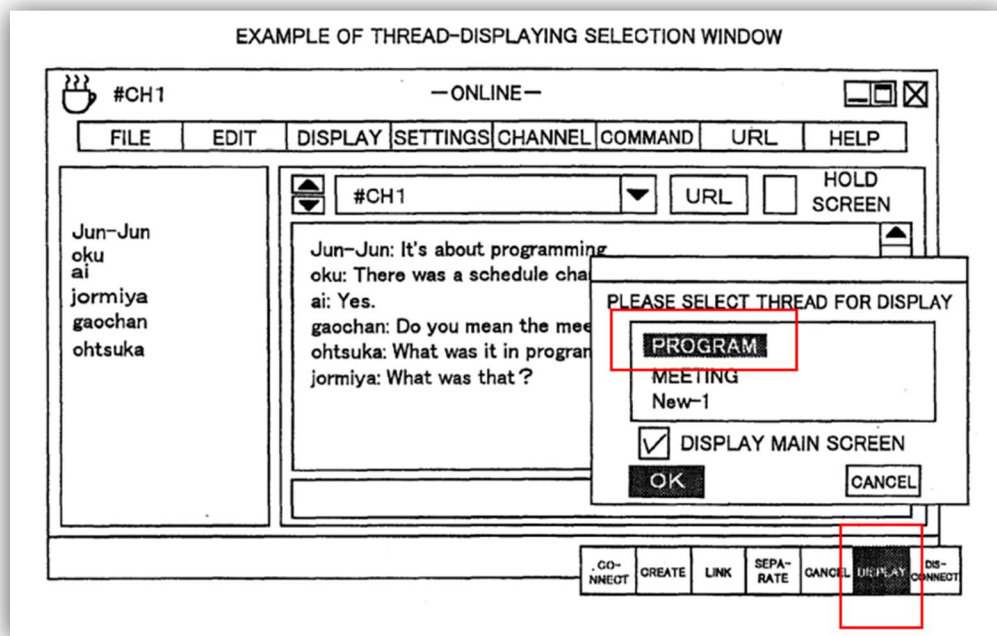
107. It is inherent that there would be a processor having computer coded instructions to perform these actions. Thus, Kakuta discloses this claim element.

- 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.**

108. It is my opinion that Kakuta discloses this limitation. Kakuta teaches that selecting the “Display” tool (“second user-selectable control associated with a first messaging communication in the second pane”) as described above (*see* Section IX.A.16) will cause at least a portion of the first subsidiary communication from the first messaging communication to be displayed in the third pane. Exh-1005 at 9:23–31, FIGS. 12, 16 and 19.³ In response to the user’s selection of “Display,” selecting the thread to be displayed, and clicking “OK,” a new subsidiary thread will be displayed where the first message is displayed is the first message of the second pane. *Id.* at 9:23–31, FIG. 7; *see also id.* 14:1–14, 12:50–54, 15:1–5, FIGS. 16 and 19.

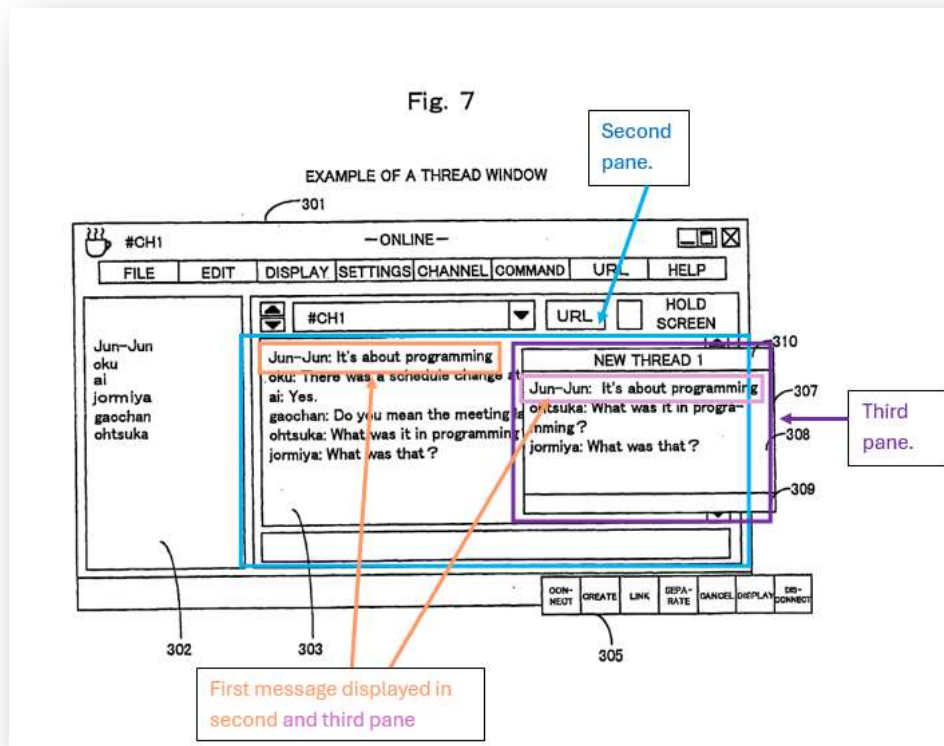
109. Figure 12 of Kakuta demonstrates the “Display” control being used to show a particular “Program” thread within the third pane, representing the subsidiary communication thread.

³ I note that the step for displaying a thread in the creation process (S357) has similar description as displaying thread in the link process (S375), so the message output in the third pane should be the same. Exh. 1005 at 12:50-54, 15:1-5, FIGS. 17, 19).



Id. at FIG. 12 (annotations added).

110. Figure 7 of Kakuta shows the third pane displaying the first communication message of the second pane also being the first communication message of the subsidiary thread (third pane).



Id. at FIG. 7 (annotations added).

111. It is inherent that there would be a processor having computer coded instructions to perform these actions. Thus, Kakuta discloses this claim element.

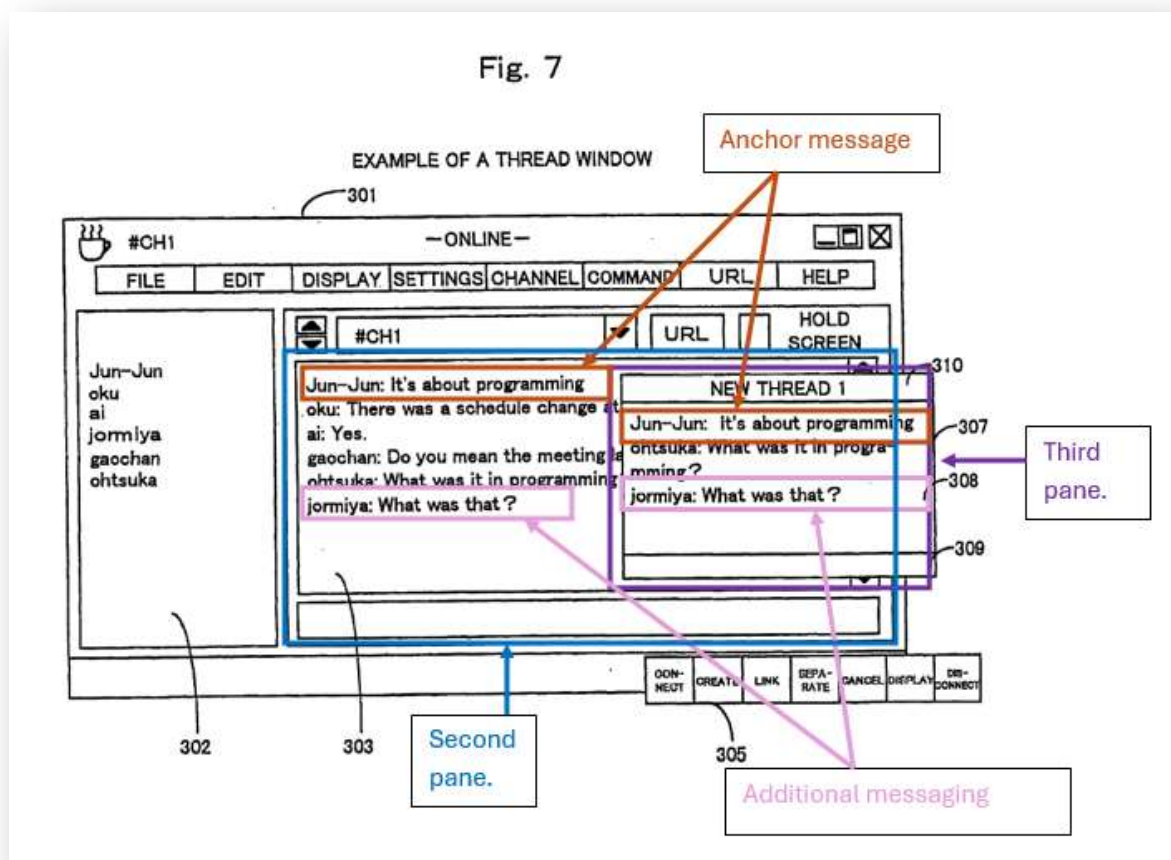
B. Dependent Claim 2

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.

112. It is my opinion that Kakuta discloses this claim. First, Kakuta discloses the apparatus of claim 1 limitation, as described above, and is incorporated by reference. *See* Section IX.A, *supra*. Second, Kakuta describes that messages displayed in thread window 307 can also be simultaneously displayed in

chat window 303. Exh-1005 at 15:11–13; *see also id.* at 9:23–31. The system allows for settings to control whether messages are displayed in both windows or exclusively in one, with a preference for user-configurable settings. *Id.* at 15:18–22. Also, “[t]he way the message group is displayed conforms to *user instructions.*” *Id.* at 2:25–26 (emphasis added).

113. Figure 7 illustrates an exemplary interface where additional messaging communications are displayed in both the second pane and third pane. *See also id.* at FIG. 17.



Id. at FIG. 7 (annotations added).

114. Moreover, Kakuta explicitly provides instructions for displaying the same message in both the second and third panes. For example, Kakuta describes a process where the creation module retrieves data and sends an instruction to the control module, which then displays a selection window based on that instruction.

Id. at 14:51–58, FIGS. 12 and 19. This illustrates how the system manages the display of information across multiple panes. Thus, Kakuta 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:**

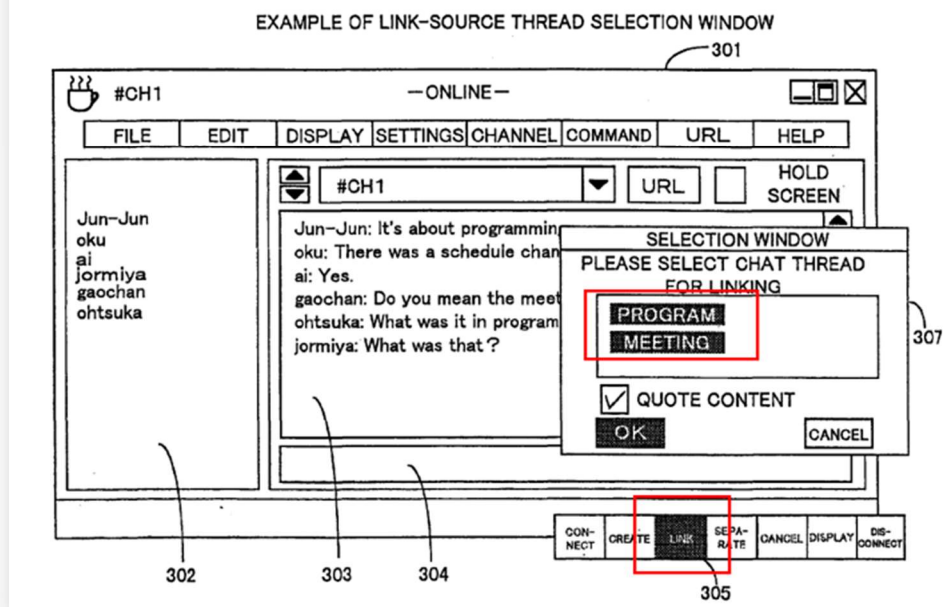
115. It is my opinion that Kakuta discloses this claim. First, Kakuta discloses the apparatus of claim 2, as described above, and is incorporated by reference. *See* Section IX.B, *supra*. Second, Kakuta discloses a third user-selectable control, “Link,” that is associated with the messaging of the second pane.

116. Kakuta describes various user-selectable controls within a thread window, such as “Create,” “Display,” “Link,” “Separate,” “Connect,” “Cancel,” and “Disconnect,” which are available on the floating “toolbar 305” when interacting with messaging communications and user IDs. Exh-1005 at FIG. 4,

8:30–58. The “Link” tool is the “third user-selectable control,” and it allows users to link different threads for display. *Id.* at 8:59–9:4. The “Link” tool is associated with all additional communication messages displayed in the second pane (i.e., all the threads a user may choose from), allowing a user to link messages from one specific thread corresponding to the additional messaging communications to another. *Id.* at FIG. 17; *see also id.* 13:6–14, 13:28–30. Selecting “Link” causes the display of the selection window shown in Figure 10, and that selection window is created by examining data in the “Administration Table.” *Id.* at 13:1–6.

117. Figure 10 illustrates a user selecting the “Link” tool, which enables the linking of messages across two or more threads—in this case, the “Program” and “Meeting” threads—associated with the additional messages.

Fig. 10



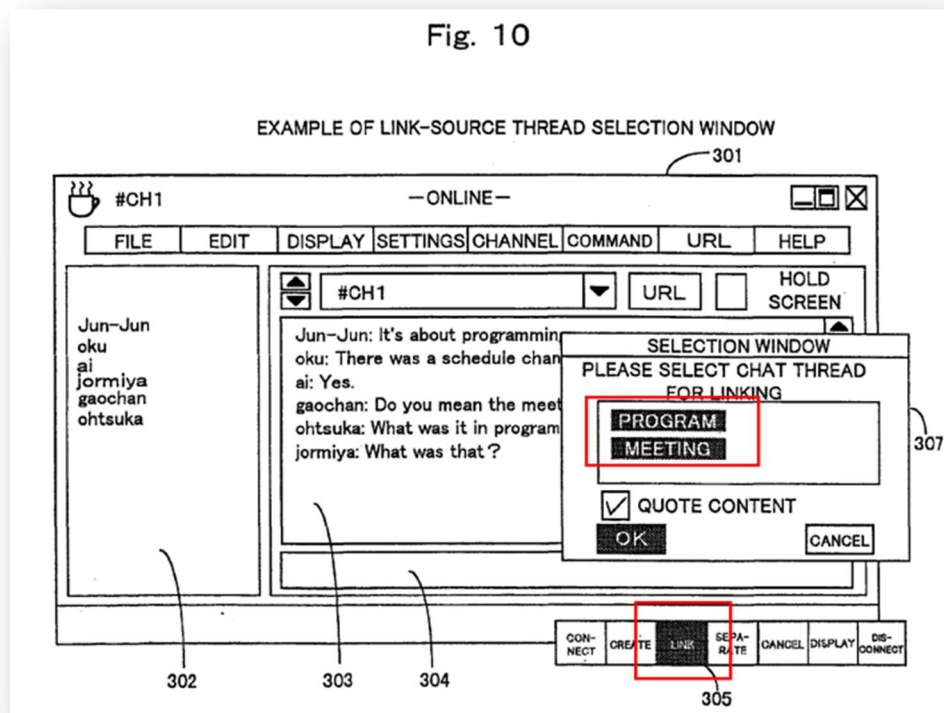
Id. at FIG. 10 (annotatations added). Thus, Kakuta discloses this claim element.

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.**

118. It is my opinion that Kakuta discloses this limitation, as described above, and is incorporated by reference. *See* Section IX.B.1, *supra*. The “third user-selectable control” is the “Link” tool, which permits users to link different threads for display and to be displayed in the first subsidiary communication thread (i.e., the third pane). Exh-1005 at 8:59–9:4. The “Link” tool is associated with additional communication messages displayed in the second pane, allowing a user

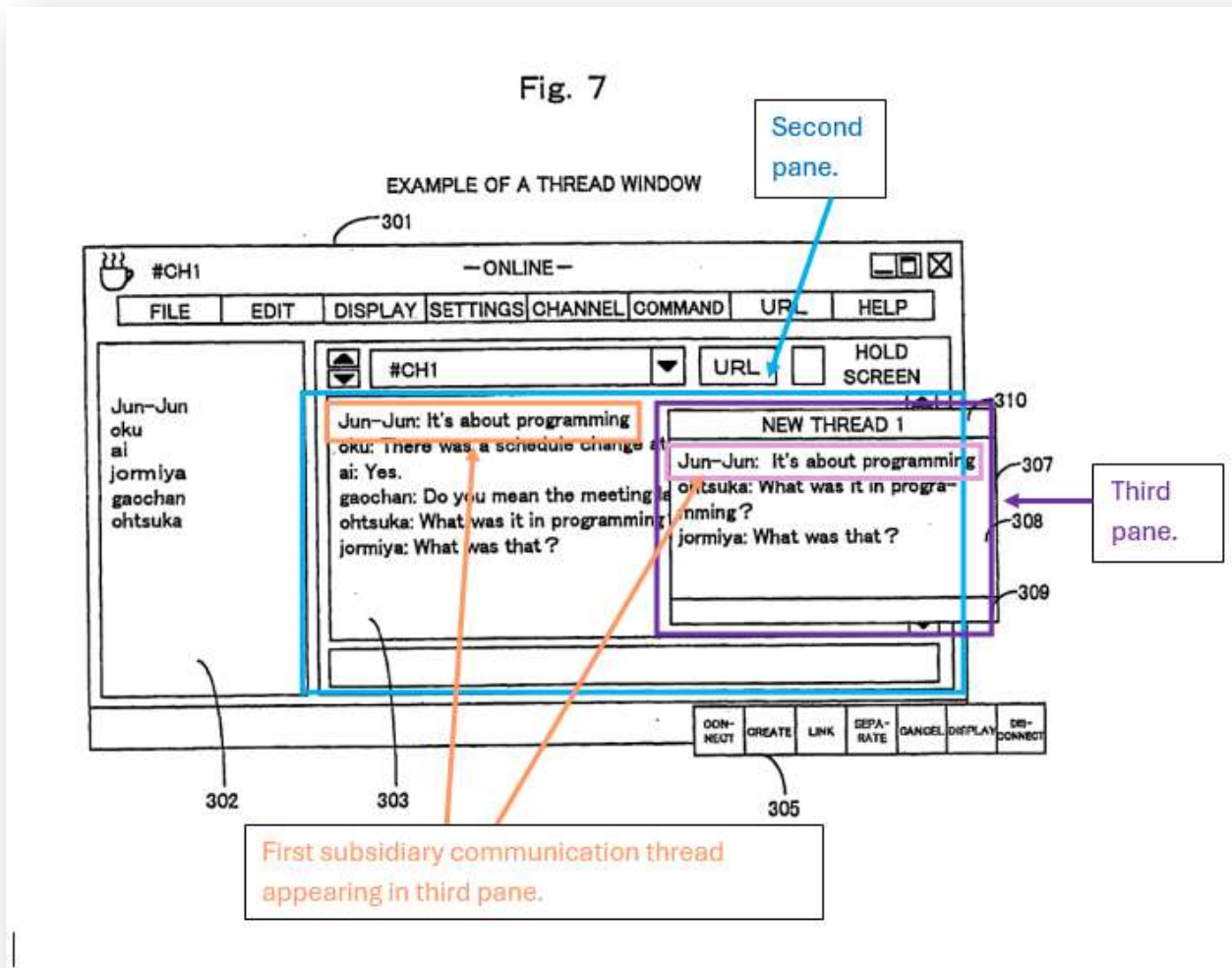
to link messages from one specific thread corresponding to the additional messaging communications to another. *Id.* at FIG. 17; *see also id.* 13:6–14, 13:28–30. In response to the user’s selection of “Link,” a new subsidiary thread will be displayed in the third pane, where at least a portion of the subsidiary thread (i.e., among the third pane) contains the additional messaging communication. *Id.* at 8:59–9:4.

119. Figure 10 illustrates a user selecting the “Link” tool, which enables the linking of messages across two or more threads—in this case, the “Program” and “Meeting” threads—associated with the additional messages.



Id. at FIG. 10 (annotations added).

120. Figure 7 illustrates an embodiment of a new thread that may depict the additional messaging communications, the programing thread, to be among the new subsidiary communication thread and displayed among the third pane.



Id. at FIG. 7 (annotations added). Thus, Kakuta discloses this claim element.

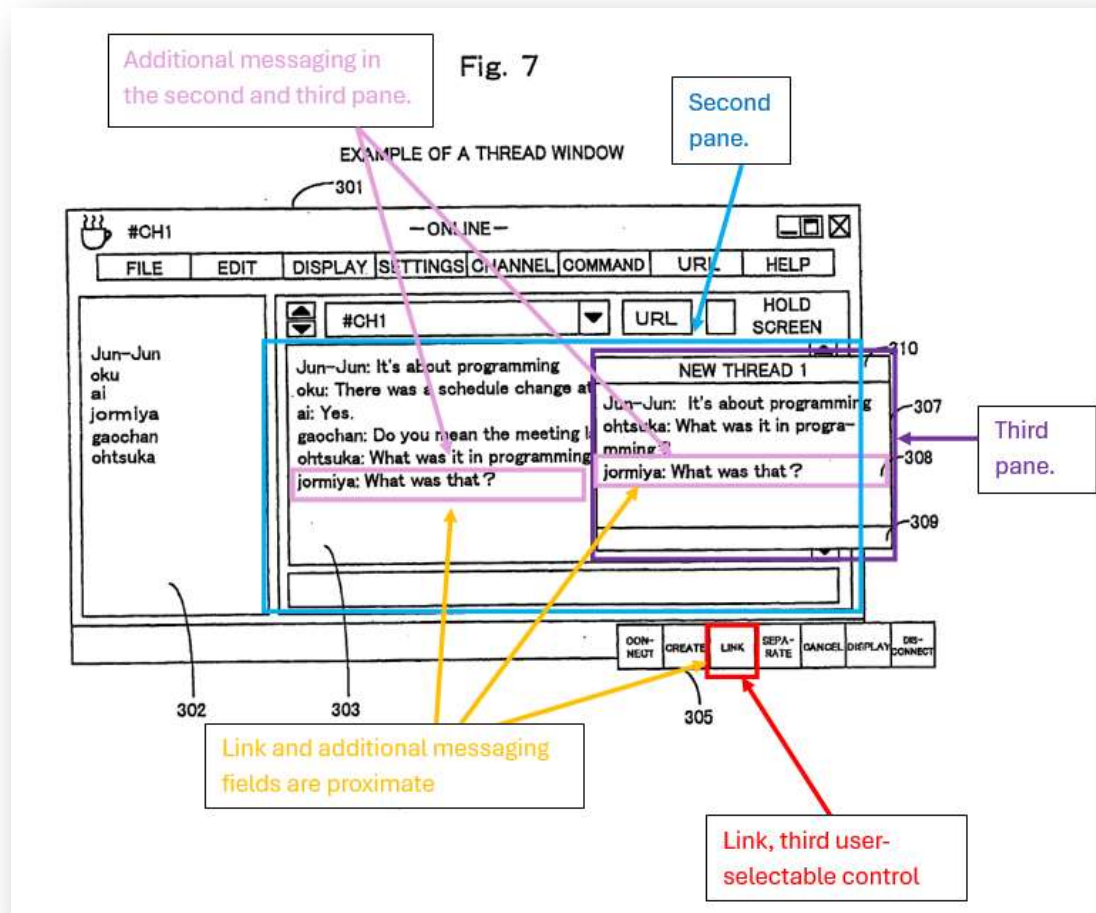
D. Dependent Claim 4

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.

121. It is my opinion that Kakuta discloses this claim. First, Kakuta discloses the apparatus of claim 3 limitation, as described above, and is incorporated by reference. *See* Section IX.C, *supra*. Second, Kakuta discloses a third user-selectable control, “Link,” which is displayed proximate to the additional messaging communication.

122. As noted above, Kakuta describes various user-selectable controls within a thread window, such as “Create,” “Display,” “Link,” “Separate,” “Connect,” “Cancel,” and “Disconnect,” which are available on the “toolbar 305” when interacting with messaging communications and user IDs. Exh-1005 at FIG. 4, 8:30–58. A “third-user selectable control” is the “Link” tool, which permits users to link different threads for display. *Id.* at 8:59–9:4.

123. As illustrated in Figure 7, Kakuta discloses positioning the “toolbar 305” (containing the third user-selectable control) “proximate to said additional messaging communication.” *Id.* at FIG. 5.



Id. at FIG. 7 (annotations added).

124. Moreover, the image below shows moving the location of the toolbar (305) from Figure 8 to Figure 7, which superimposes the toolbar (305) onto the

additional messages of the second and third panes.

Fig. 8

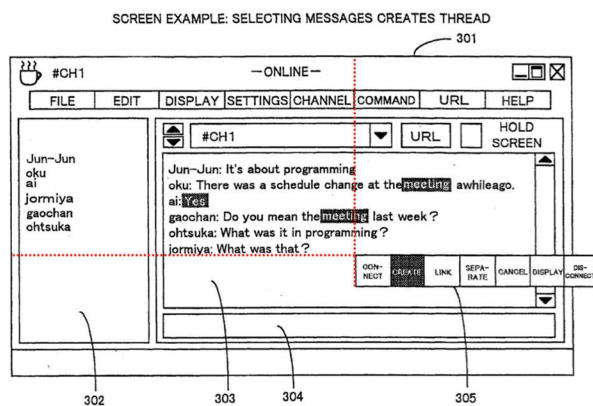
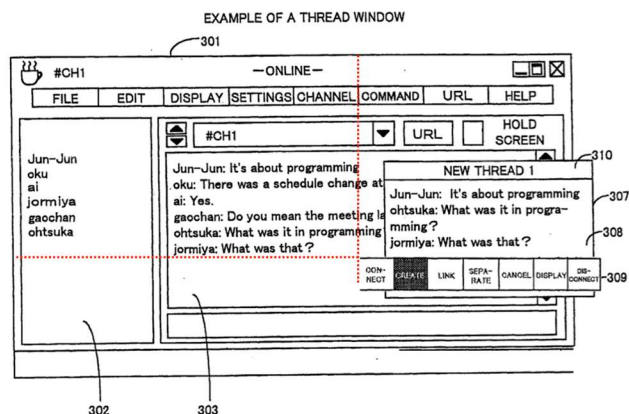


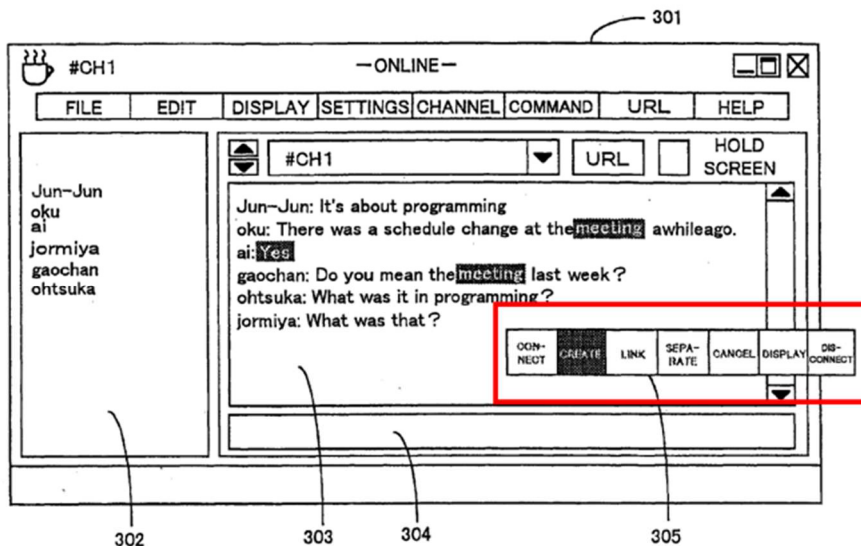
Fig. 7



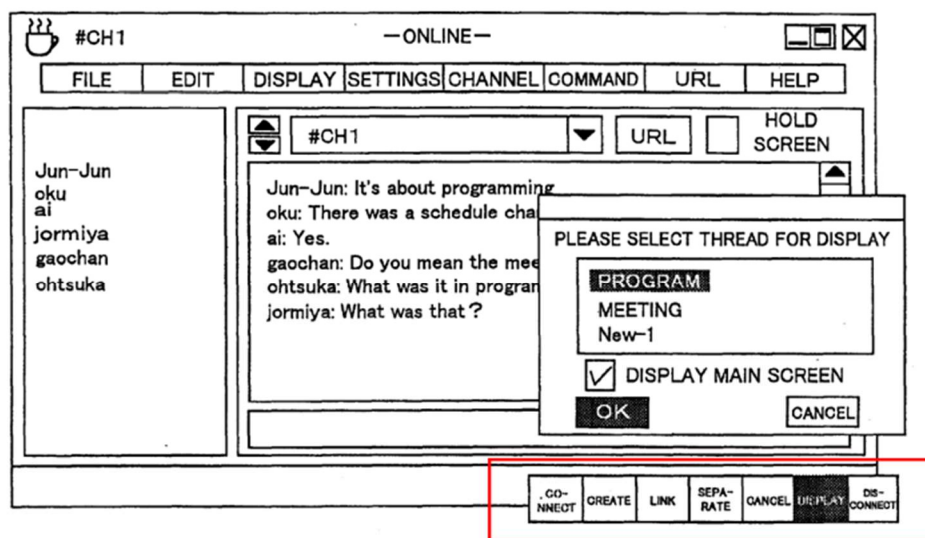
Id. at FIGS. 7 and 8 (superimposed).

125. To the extent it is not explicitly proximate in the figures, the “toolbar 305” is also “floating” permitting movement among the user interface of the display control device. *See id.* at FIGS. 1 and 12; *see also id.* at FIGS. 4 and 6 (illustrating “tool bar 305” in different locations).

SCREEN EXAMPLE: SELECTING MESSAGES CREATES THREAD



EXAMPLE OF THREAD-DISPLAYING SELECTION WINDOW



126. *Id.* at FIGS. 8 and 12 (annotations added illustrating the “floating” toolbar 305 and its ability to be moved, positioning it within proximity to the additional messaging communications). Thus, Kakuta 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.

127. It is my opinion that Kakuta discloses this claim. First, Kakuta discloses the apparatus of claim 2 limitation, as described above, and is incorporated by reference. *See* Section IX.B, *supra*. Second, Kakuta teaches that the additional messaging in the second pane can be “display[ed] in a time sequence, display[ed] in a user-and-time sequence, or otherwise designed to meet needs.” Exh-1005 at 9:1–4.

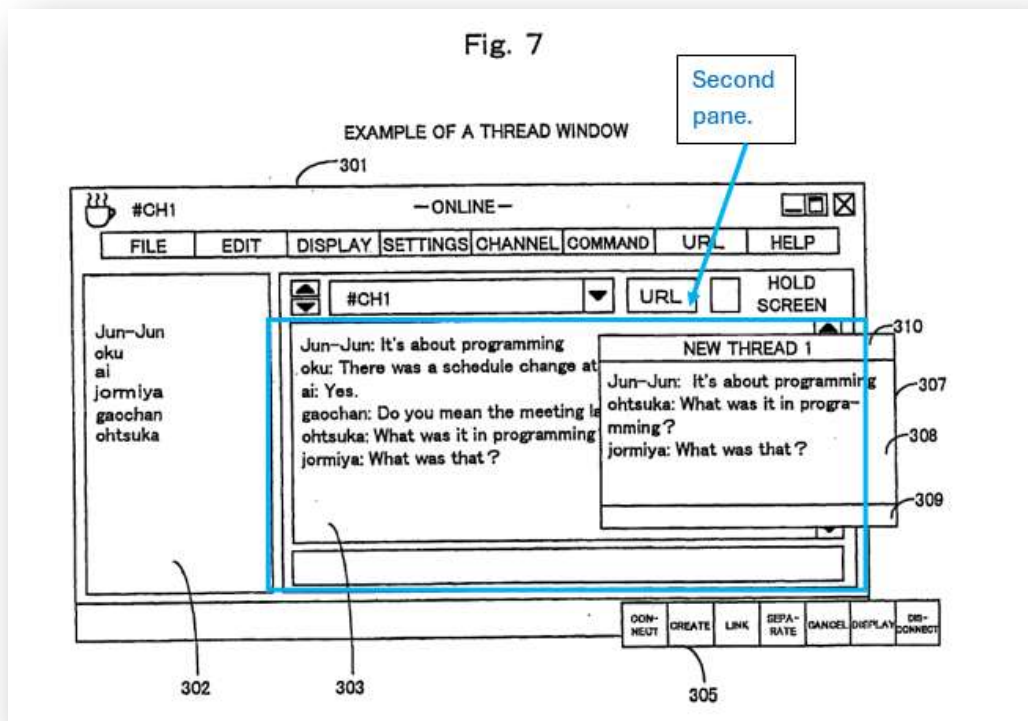
128. Furthermore, Figure 2 indicates that the messaging in Figure 7, including the first, additional, and subsequent messages, are displayed in the second pane in chronological order.

Fig. 2

MESSAGE LIST

CHANNEL	Th. ID	MESSAGE ID	MESSAGES
CH-1	Th1	1	about programming ...
	Th2	2	the recent meeting ...
	Th2	3	yes
	Th2	4	meeting
	Th1	5	what in programming ...
	Th1	6	what was that ?
	⋮	⋮	⋮

Id. at FIG. 2.



Id. at FIG. 7 (annotations added). Thus, Kakuta discloses this claim.

F. Dependent Claim 6

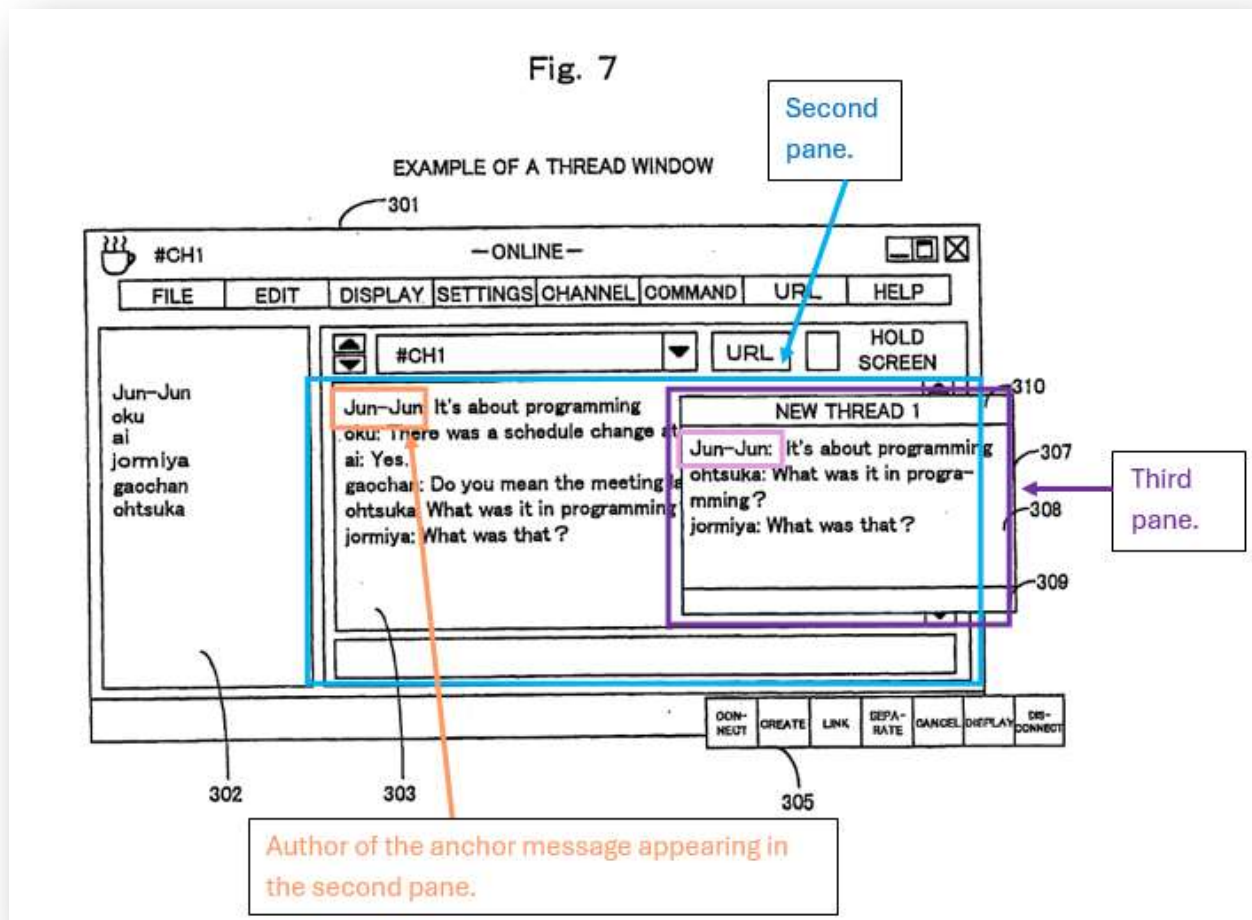
The apparatus of claim 3, wherein causing at least a portion of said first subsidiary communication thread containing said additional messaging communication to be displayed in said third pane comprises displaying said sidebar text-entry field associated with said third pane that is operable to receive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

129. It is my opinion that Kakuta discloses this claim. First, Kakuta discloses the apparatus of claim 3 limitation, as described above, and is incorporated by reference. *See* Section IX.C, *supra*. Second, Kakuta also teaches that the subsidiary communication thread (third pane) contains additional messaging and that the third pane has a text-entry field 309 operable to receive

Exh-1005 at FIG. 7 (annotations added). Thus, Kakuta discloses this claim.

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.

130. It is my opinion that Kakuta discloses this claim. First, Kakuta discloses the apparatus of claim 3 limitation, as described above, and is incorporated by reference. *See* Section IX.C, *supra*. Second, Kakuta also discloses displaying identifying information (author) associated with the anchor message in the second and third panes. Figure 7 illustrates the display of “identifying information” in the form of the author associated with the anchor message that is associated with the additional messaging communication in the second pane.



Exh-1005 at FIG. 7 (annotations added). Thus, Kakuta discloses this claim.

H. 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.

131. It is my opinion that Kakuta discloses this claim. First, Kakuta discloses the apparatus of claim 7 limitation, as described above, and is incorporated by reference. *See* Section IX.G, *supra*. Second, Kakuta also teaches an anchor message with identifying user information (author) and a fourth user-selectable control causing the display of at least a portion of the subsidiary communication thread in the third pane.

132. Kakuta provides a fourth user-selectable control. The fourth user selectable control is the selection of a user or a message with an identifying author in a thread, which will “create” a third pane. *Id.* at 5:3-4, FIG. 8. Kakuta teaches that “the creation means creates, *based on the selection of the messages from a user, message groups containing the selected messages and message group information containing message-identifying information for the selected messages.*” *Id.* at 3:43-47 (emphasis added). The “*thread is created by selecting messages as a whole, or words included in messages.*” *Id.* 8:45-47 (emphasis added).

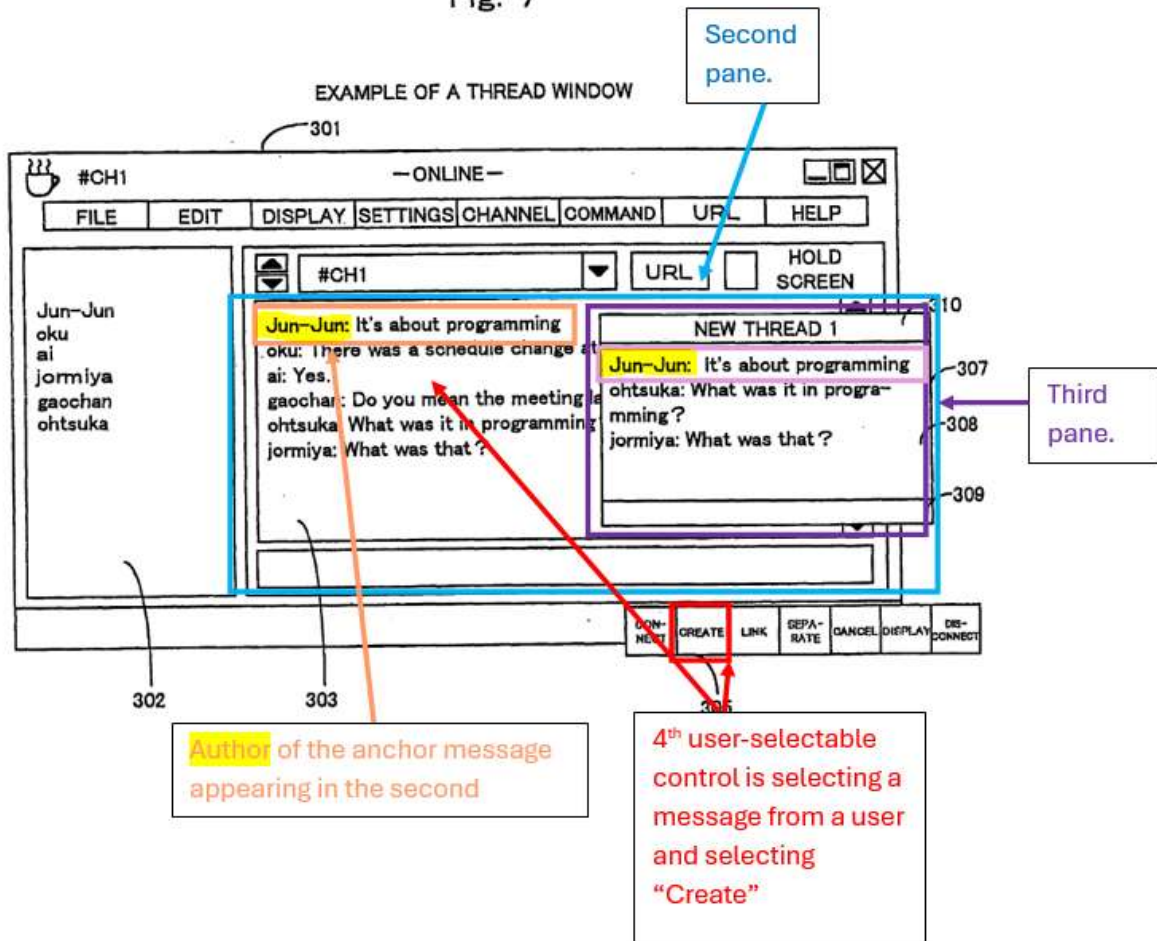
133. A PHOSITA would understand that one way of “selecting messages as a whole” (in the second pane) would be to select an entire message, which

includes selecting the name of the sender at the start of the line. Selecting the sender/author at the start of the line would meet the “identifying information associated with said anchor message” requirement. Furthermore, a PHOSITA would understand that a standard interface means for selecting an entire line or paragraph of text (since at least the late-1980s) was to triple click anywhere within the line. So, triple clicking on the user’s name would select the entire line. *See* Exh-1013 at 96. The selected lines (including the usernames that are the fourth user-selectable control) are then “operable to cause ... third pane” (Exh-1001 at claim 9) because the “thread is created by selecting messages as a whole, or words included in the messages.” Exh-1005 at 8:45-47.

134. Alternatively, as noted above, Kakuta describes various user-selectable controls within a thread window, such as “Create,” “Display,” “Link,” “Separate,” “Connect,” “Cancel,” and “Disconnect,” which are available among “toolbar 305” when interacting with messaging communications and user IDs. Exh-1005 at FIG. 4, 8:30–58; *see also id.* at FIG. 8 (message selection). In the alternative, the “fourth user-selectable control” is the selectable user ID or author (i.e., identifying information) that is associated with an anchor message. This selection is “operable to cause” the display of at least a portion of said subsidiary-communication thread because the selection influences the behavior of the information that is included in the selection window (*see id.* at FIG.16 (Step 351),

12:15–18) and therefore determines what information is displayed in the third pane. After selecting the user ID or author and then selecting the “Create” tool (*Id.* at FIG. 5, 8:11–12.), a user may initiate a new subsidiary thread (i.e., a third pane) that quotes the messages, including the anchor message, which is then generated and displayed in the third pane. *Id.* at 8:20–37, FIGS. 6 and 7. Figure 7 illustrates the user selecting a user ID or author and invoking the “Create” tool.

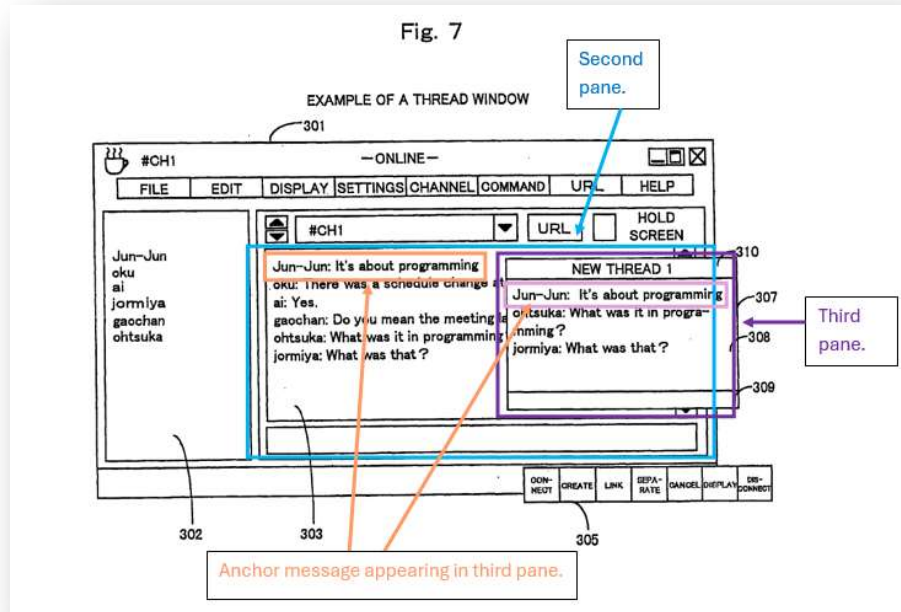
Fig. 7



Id. at FIG. 7 (annotations added illustrating the user ID and create selections).

135. Once those two items are selected, a third pane is created that will display the messages from that author in the third pane. *Id.* at 12:10–59 (stating that when a user composing a thread is selected, a confirmation window will appear, and once “OK” is selected from the confirmation window, the selected information will be displayed in the third pane); *see also id.* at FIG. 16, claim 2.

136. Figure 7 illustrates the display of the generated third pane with the anchor message being the additional communication messages among the second pane.



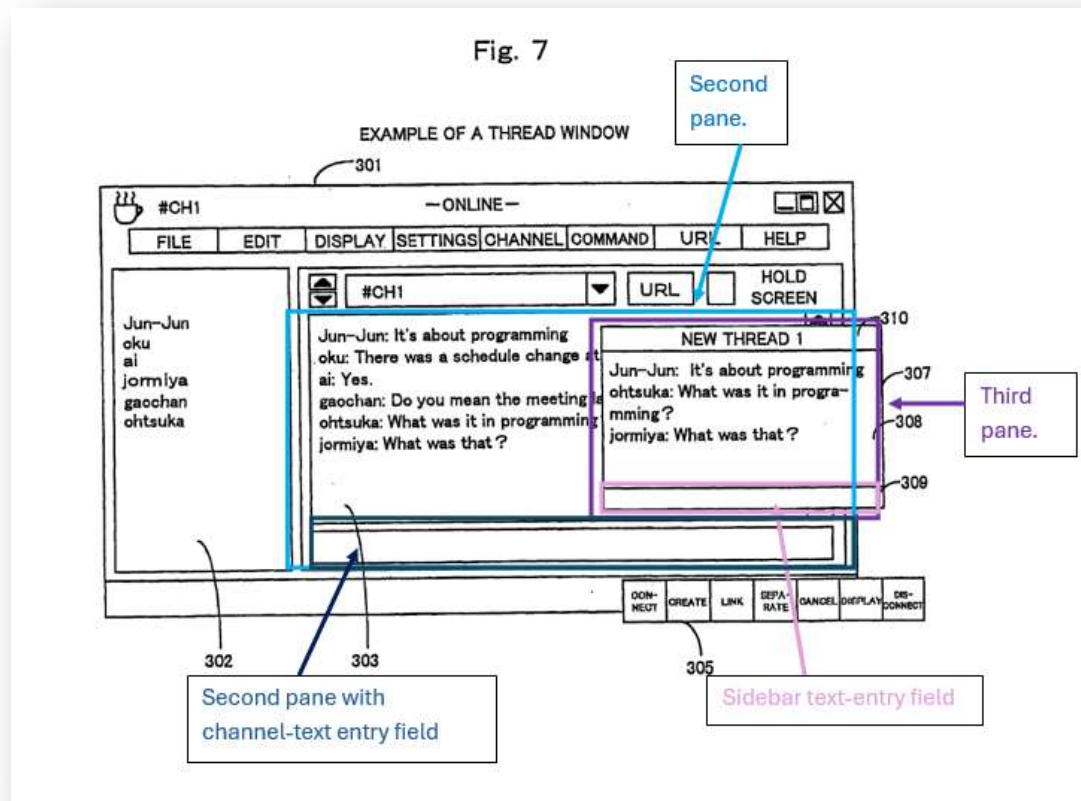
Id. at FIG. 7 (annotations added). Thus, Kakuta discloses this claim.

I. 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.

137. It is my opinion that Kakuta discloses this claim. First, Kakuta discloses the apparatus of claim 1 limitation, as described above, and is incorporated by reference. *See* Section IX.A, *supra*. Second, Kakuta teaches the

simultaneous display of the sidebar text-entry field in the third pane with the display of said channel text-entry field in the second pane, and both are selectable by a user to receive input representing a new message. This is illustrated in Figure 7:



Exh-1005 at FIG. 7 (annotations added). Thus, Kakuta discloses this claim.

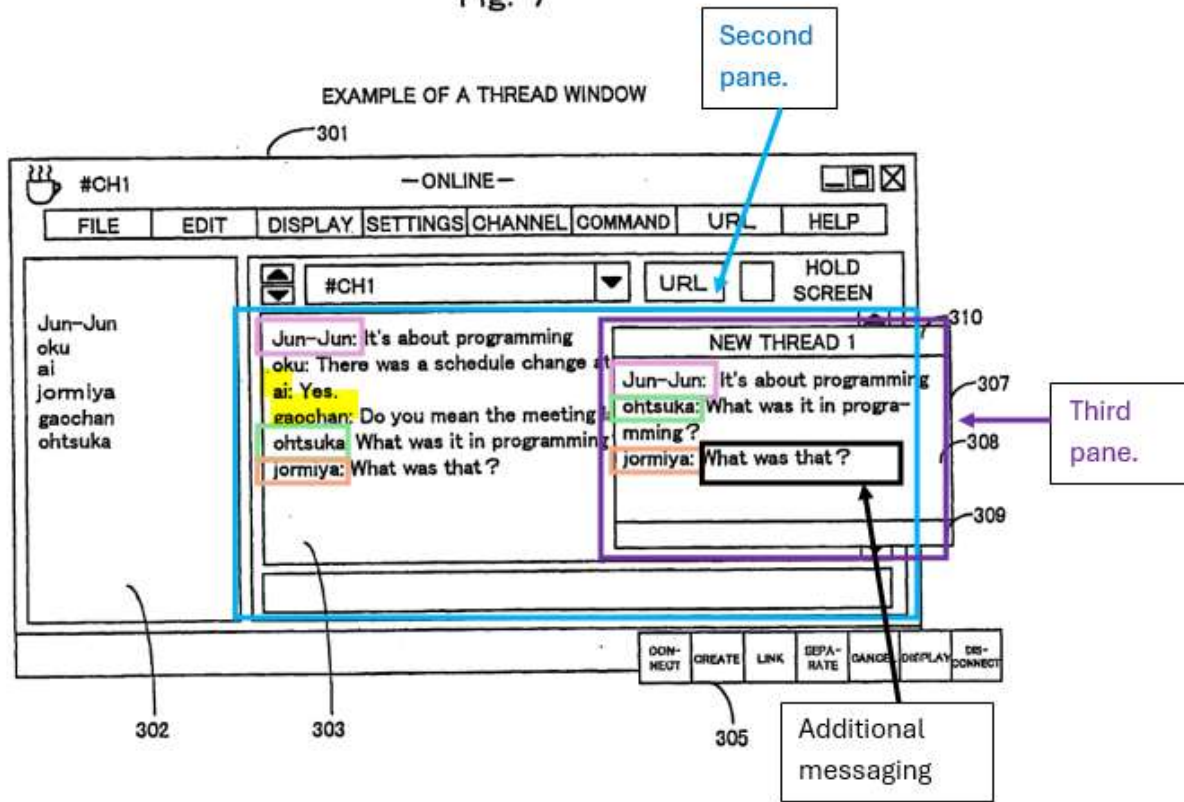
J. Dependent Claim 11

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.

138. It is my opinion that Kakuta discloses this claim. First, Kakuta discloses the apparatus of claim 1 limitation, as described above, and is incorporated by reference. *See* Section IX.A, *supra*. Second, Kakuta discloses at least one member of the group transmitting additional communication to fewer than all the group members. For instance, Kakuta has a private group chat functionality where only a select few members from the main, public chat channel are placed among the new private thread. Exh-1005 at 3:54–63 (“The disclosure level setting may be designated by the individual users, or automatically set in according to the type of message group. For example, wherein the message group is created by designating individual users, the creating means sets the disclosure level to ‘Private.’”).

139. Figure 7 illustrates the transmission of the additional messaging communication to selected members of the group, rather than to all members.

Fig. 7



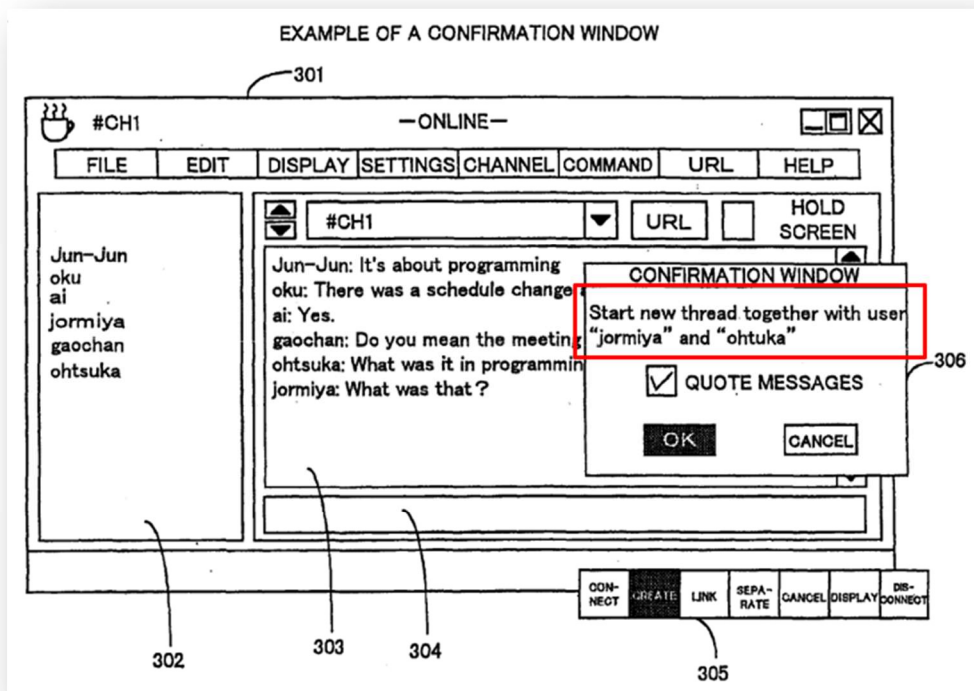
Id. at FIG. 7 (annotations added).

140. Additionally, this is further disclosed by Figure 3, which shows the network's "ADMINISTRATION TABLE," where the "DISCLOSURE LEVEL" may be set to "PRIVATE" and limit the communication to specific member users only.

ADMINISTRATION TABLE								
Th. ID	TITLE	AUTHOR	MEMBER USERS	MESSAGE ID	LINK SOURCE	FORWARDING DEST.	DISCLOSURE LEVEL	STATUS
1	PROGRAM	Jun-Jun	Jun-Jun, ohtsuka, jormiya				PRIVATE	DISPLAY
2	MEETING	oku		2,3,4			PUBLIC	DON'T DISPLAY

Id. at FIG. 3 (annotations added).

141. Even further, Figure 6 demonstrates the capability to create a private thread with only two members from the public thread, as well as a confirmation window that is converted into a subsidiary thread, which can be viewed simultaneously alongside the main thread pane. *See also id.* at Steps 14-16 & 18 of FIG. 14, 10:20-27, 10:38-44.



Id. at FIG. 6 (prompting the user to establish a subsidiary chat thread with among only a select few users among the greater channel). Thus, Kakuta discloses this claim.

K. 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.

142. It is my opinion that Kakuta discloses this claim. First, Kakuta discloses the apparatus of claim 1 limitation, as described above, and is incorporated by reference. *See* Section IX.A, *supra*. Second, Kakuta discloses

instances where changes in the channel, such as adding users who are not members of the channel, are managed by the system. *See* Exh-1005 at 11:6–9. Specifically, Kakuta teaches “instances in which the *joining/departing of channel participating users*, change in topic, altering channel mode, or altering channel operator characteristics, for example, are received. Herein, the received data is sent from the reporting module 22 to the control module 32.” *Id.* at 11:6–10 (emphasis added).

143. Additionally, Kakuta explains that the creation module 21, upon receiving instructions from the administration module 23, processes thread-related tasks such as creation, segregation, linking, and display. *Id.* at 7:4–6. The creation module updates the administration table and reports the updated thread information to the reporting module 22. *Id.* at 7:6–10. The reporting module then transmits and receives thread information, updating the administration table and message list, and can transmit this information across different display control devices within the channel. *Id.* at 7:11–22. Notably, thread creation commands can include parameters like thread ID, creator, user list, and the option to set the thread as “Private,” restricting access to certain users and including others. *Id.* Thus, Kakuta discloses this claim.

L. 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:

144. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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:**

145. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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**

146. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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,**

147. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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,

148. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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;**

149. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.A.7, *supra*.

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

150. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.A.8, *supra*.

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

151. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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;

152. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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

153. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.A.11, *supra*.

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

154. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.A.12, *supra*.

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

155. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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

156. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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;

157. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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:**

158. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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.**

159. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.A.17, *supra*.

M. 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.

160. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Sections IX.B, IX.L *supra*.

N. 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:**

161. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Sections IX.C.1, IX.M *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.**

162. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.C.2, *supra*.

O. 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.

163. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Sections IX.F, IX.N, *supra*.

P. 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.

164. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Sections IX.G, IX.N, *supra*.

Q. 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.

165. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Sections IX.H, IX.P, *supra*.

R. 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.

166. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Sections IX.I, IX.L, *supra*.

S. 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:

167. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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:**

168. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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**

169. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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,**

170. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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,

171. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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;**

172. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.A.7, *supra*.

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

173. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.A.8, *supra*.

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

174. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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;

175. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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

176. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.A.11, *supra*.

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

177. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.A.12, *supra*.

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

178. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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

179. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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;

180. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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:**

181. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.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.**

182. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.A.17, *supra*.

T. 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.

183. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Sections IX.B, IX.S, *supra*.

U. 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:**

184. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Sections IX.C.1, IX.T, *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.**

185. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.C.2, *supra*.

V. 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:**

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

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

187. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.A.7, *supra*.

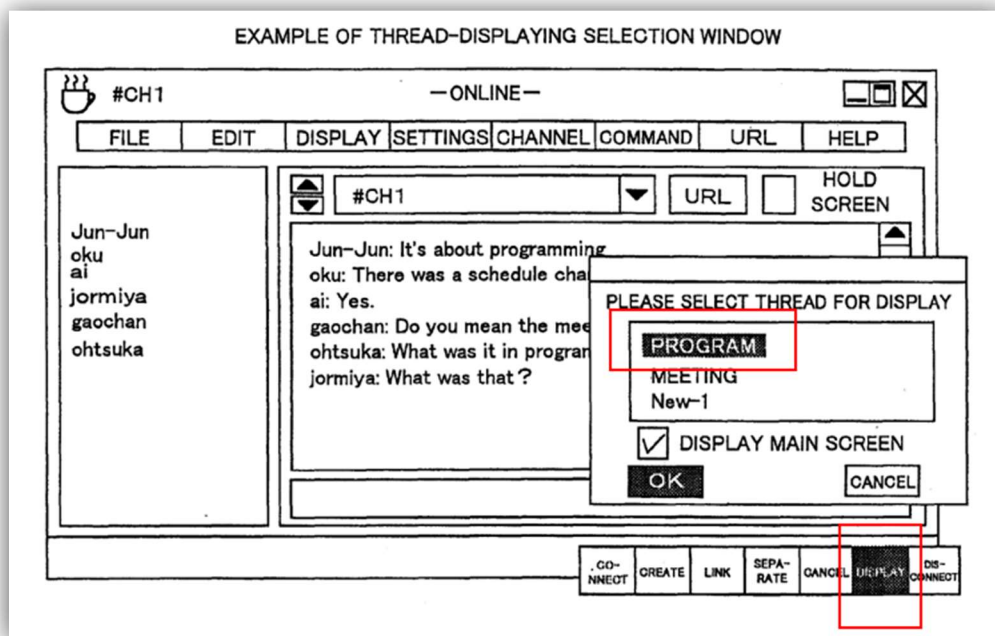
3. 30[b] causing the first messaging communication to be rendered within a messaging pane in a communication interface of the communication platform;

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

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

189. It is my opinion that Kakuta discloses this limitation, as described above, which is incorporated by reference. *See* Section IX.A.16-17, *supra*. Further, Kakuta discloses receiving a request to create a subsidiary thread. Kakuta provides multiple methods in which such a request can be made including using the “Create,” “Display,” and/or “Link” tools. Exh-1005 at 8:30–58, FIG. 4. When “Display” is selected, the user is prompted to select a specific thread to be shown within the subsidiary communication thread. *Id.* at 9:23–31, FIGS. 12, 16 and 19. Thereafter, the messages of the selected thread will appear in the new (third pane) subsidiary communication thread. *Id.* at 9:23–31; 11:63-67; 14:45-15:9 (providing the steps for the “Display” feature, including that in S434, a “thread window” (pane 3) is created); FIG. 19 (showing that the selected thread is displayed in step S434); *see also* FIG. 7 (illustrating the thread window).

190. Further, Kakuta’s Figure 12 illustrates a “selection window” where a user is prompted with a choice of subsidiary threads for the creation of new subsidiary thread communications.



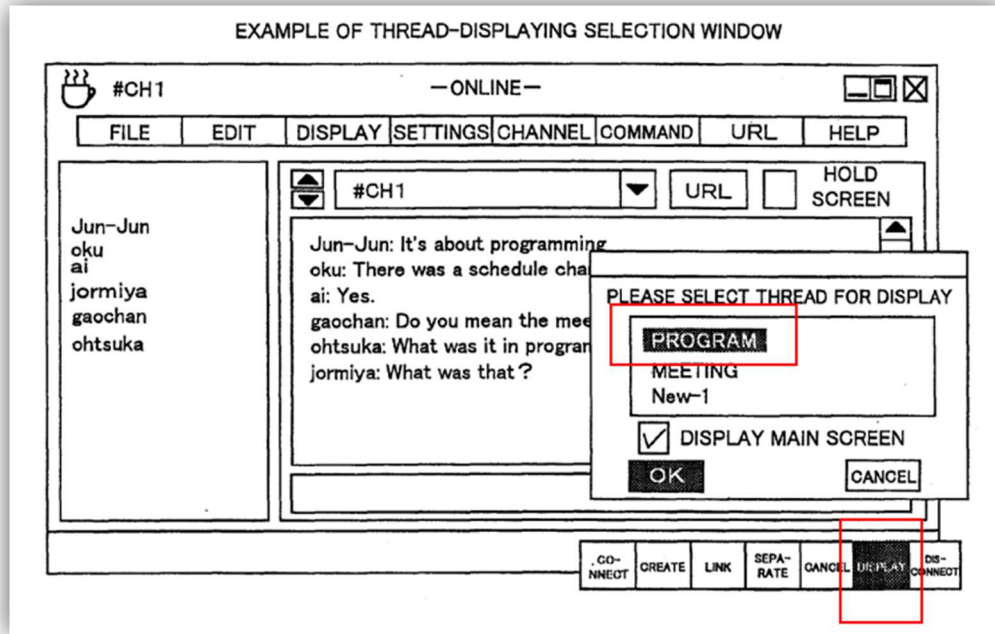
Id. at FIG. 12 (annotations added highlighting selection of a thread for display to create new subsidiary thread communications).

191. Thus, Kakuta discloses this claim element.

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 [to] [sic] the first messaging communication, wherein the thread summary indicator is configured to be selectable by a user with access to the first messaging communication;**

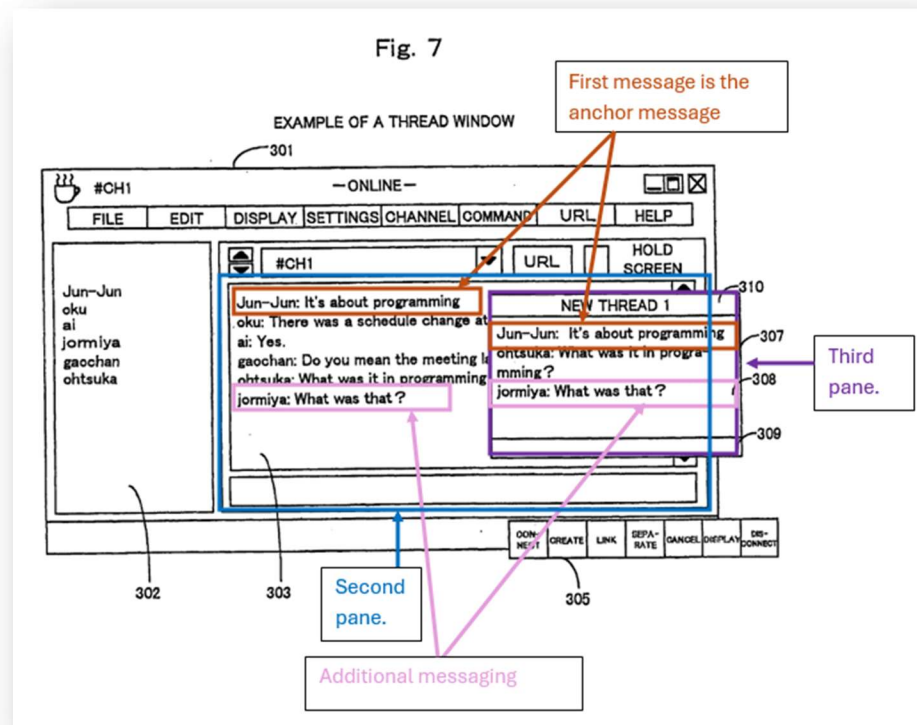
192. It is my opinion that Kakuta discloses this limitation, as described above, and is incorporated by reference. *See* Sections IX.A.16-17, *supra*. Further, when selected, “Display” generates a “pop-up selection window,” within the messaging pane, that contains a “thread summary indicator,” such as “Program.”

193. The thread summary indicator, “Program,” is then displayed proximate to the “first messaging communication.” Figure 12 illustrates the “Display” tool being invoked to show various thread summary indicators, including a “Program” thread, representing the subsidiary communication thread.



Id. at FIG. 12 (annotations added).

194. The thread summary indicator, “Program,” is then selectable by a user with access to the first messaging communication which is the anchor message of the particular thread. Figure 7 illustrates this:



Id. at FIG. 7.

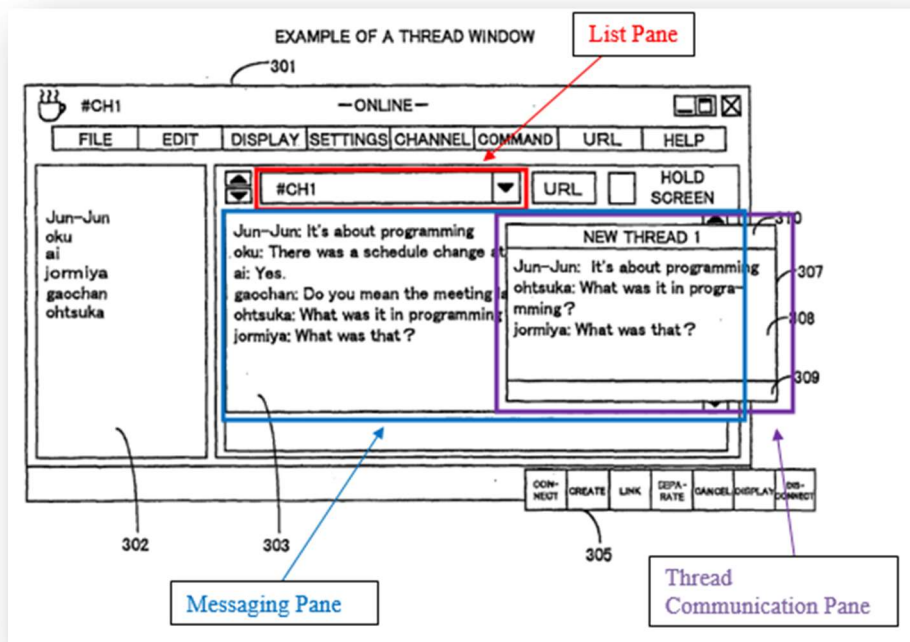
195. Moreover, Kakuta discloses that—consistent with a PHOSITA’s understanding of windowing systems since the early 1980s—the selection window 307 is moveable, appearing at slightly different positions across Kakuta’s figures 10 and 12. To the extent that the thread summary indicator “Program” is not explicitly proximate to the first messaging communication, it is inherent that the movable selection window discloses this element. Thus, Kakuta discloses this claim element.

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

196. It is my opinion that Kakuta discloses this limitation, as described above, and is incorporated by reference. *See* Section IX.V.5, *supra* (allowing the user to select a thread to view within the subsidiary thread window.).

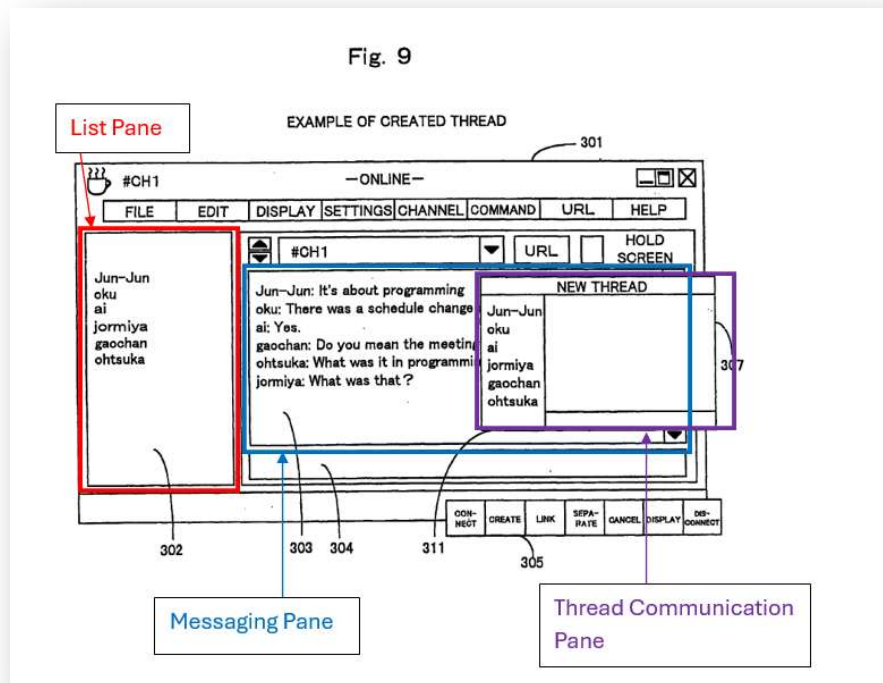
7. 30[f] causing, based at least in part on receiving the indication of the input, rendering of the subsidiary thread communication to a thread communication pane within the communication interface, wherein a list pane, the messaging pane, and the thread communication pane are configured to be rendered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

197. It is my opinion that Kakuta discloses this limitation, as described above, and is incorporated by reference. *See* Sections IX.A.15–17, *supra*. Further, Figure 7 illustrates a “list pane,” “messaging pane,” and “thread communion pane” configured to be rendered within the display window simultaneously.



Id. at FIG. 7 (annotations added).

198. I note that in addition to the List Pane option above, 302 can also be considered a list pane as it provides the list of users. *See id.* at 8:56–58 (“Displaying a list of users in the channel by displaying a user list 311, shown in FIG. 9 in the new thread window, is desirable.”); *id.* at FIG. 9 (providing the same list of users in 302 as 311). This is illustrated below:



Id. at FIG. 9 (annotations added).

199. To the extent that Kakuta’s figures show the boundary of the “thread communication pane” extending beyond the edge of a defined display window, a PHOSITA would understand such issues of window layout to be a simple matter of aesthetics. Instead, maintaining the boundaries of all graphical elements within a defined display window would be a simple and routine matter of design choice, and well within capabilities of a PHOSITA. Moreover, Kakuta discloses that—consistent with a PHOSITA’s understanding of windowing systems since the early 1980s—the thread window 307 is moveable, appearing at slightly different positions across Kakuta’s figures 7 and 9. To the extent that the thread window is

not explicitly rendered within a defined display window, it is inherent that the movable thread window discloses this element. Thus, Kakuta discloses this claim element.

X. GROUND 2: CLAIMS 1-7, 9-19, AND 21-30 ARE OBVIOUS OVER KAKUTA

200. As detailed above in Section IX, it is my opinion that Claims 1-7, 9-12, 15-19, 21-22, 25-27 and 30 are anticipated by Kakuta. To the extent that the Patent Owner contends that Kakuta does not anticipate any of these claims because it does not expressly teach certain aspects of these claims, as listed below, I find that Kakuta on its own clearly renders these claims obvious based on the knowledge of a PHOSITA. Moreover, claims 13-14, 23-24, and 28-29 are obvious in light of Kakuta.

A. Claims 1, 3, 13, 15, 17, 23, 25, and 27-28, and Dependent Claims 2-7, 9-14, 16-19, 21-24, and 26-30

1. Claims 1, 15, and 25, and Dependent Claims 2-7, 9-14, 16-19, 21-24, and 26-29

201. To the extent the Patent Owner asserts that Kakuta does not expressly teach certain claim elements of independent claims 1, 15, and 25 (1[a], 1[c], 1[d], 1[o], 15[pre], 15[b], 15[c], 15[n], 25[pre], 25[b], 25[c], and 25[n]), it is my opinion that these elements are obvious in light of Kakuta. Anticipated claims 2-7 and 9-12 depend from claim 1, anticipated claims 16-19 and 21-22 depend from claim 15, and anticipated claims 26-27 depend from claim 25, so the analysis of these

claim elements (1[a], 1[c], 1[d], 1[o], 15[pre], 15[b], 15[c], 15[n], 25[pre], 25[b], 25[c], and 25[n]) are incorporated by reference into these dependent claims, making claims 2-7, 9-12, 16-19, 21-22, and 26-27 also obvious. Moreover, this analysis is further incorporated into the obvious analysis of claims 13-14, 23-24, and 28-29 below (Section X.E).

a. Claim Elements 1[a], 15[pre], and 25[pre]

202. To the extent the Patent Owner asserts that Kakuta does not expressly teach claim element 1[a], 15[pre], and 25[pre], in particular a processor having computer coded instructions, it is my opinion that Kakuta renders these claim limitations obvious. Kakuta discloses a display control program executed on a chat device, which performs various tasks such as managing threads and controlling the display of information. Exh-1005 at 4:17–37, Claims 10, 20. Given that such tasks inherently require the execution of processes, it would have been obvious to implement a processor to perform these functions. *See id.*

203. Specifically, Kakuta discloses modules (e.g., the creation module 21, reporting module 22, and third input/output control module 23) that interact with memory and these interactions are facilitated by some processing capability. *Id.* at 6:9–13; FIG. 1. A PHOSITA would have understood that, in order to execute the display control program and manage these interactions between modules, the inclusion of a processor is a routine and well-known solution in the field. Such a

processor would execute processes, which Kakuta explicitly discusses, including instructions from the administration module to the creation module and further to the third input/output control module. *Id.* at 7:1–3, 7:48–51.

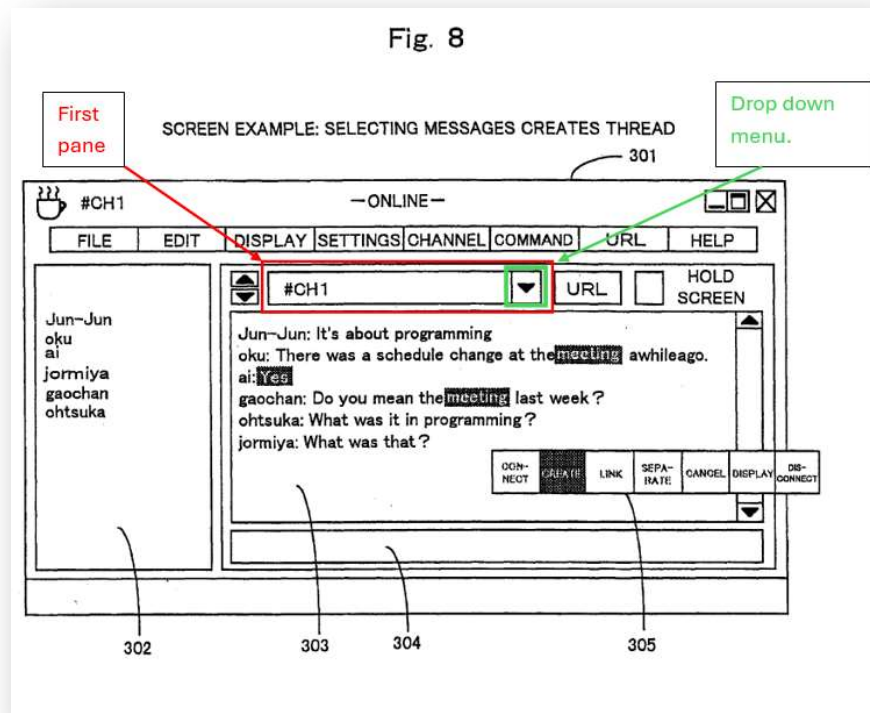
204. The use of processors to execute software programs, including display control programs, was well-established at the time of Kakuta’s invention. It would have been obvious to a PHOSITA that a processor is necessary to execute the display control program and manage communication between memory and system components—a routine and well-known design choice.

205. It would have been obvious for a PHOSITA to include a processor to implement the system’s functions. It would have also been obvious to a PHOSITA that the memory must store prewritten computer-coded instructions, as such instructions are necessary for executing the display control program and coordinating the functions of the various modules interacting with user inputs, which is a well-known and routine function in computer systems. Thus, combining Kakuta’s teachings with the common use of processors renders this element obvious to a PHOSITA.

b. Claim Elements 1[c], 15[b], and 25[b]

206. To the extent the Patent Owner asserts that Kakuta does not expressly teach “a first pane configured to display a plurality of channel identifiers,” Kakuta renders these claim limitations obvious. As discussed above, Kakuta’s first pane

identifies the channel identifier (#CH1) for the messaging communications in the second pane. Kakuta inherently teaches displaying a plurality of channel identifiers. Kakuta illustrates this by providing a drop-down function, highlighted in green below.



Exh-1005 at FIG. 8 (annotations added).

207. It is known in the field that when a drop-down option is selected, additional options, similar to the one chosen, will be displayed. A PHOSITA would understand that the drop-down would list different channels. This was well known in the art. *See, e.g.*, Exh-1012 at 52-53, 549-51 (discussing combo boxes, which are dropdown boxes).

208. Kakuta teaches that each channel identifier corresponds to an associated group of members who are users of said system. For example, Kakuta provides that: “[w]hen a user chooses individual users within a channel, the creation means creates a message group that will be constituted by messages from the chosen users. Information specifying the users comprising the message group, nicknames, for example, are contained in the message group information. Selecting user names, or selecting user messages can be given as methods of choosing users.” Exh-1005 at 3:32–38. Thus, Kakuta renders these claim elements obvious to a PHOSITA.

c. Claim Elements 1[d], 15[c], and 25[c]

209. To the extent the Patent Owner asserts that Kakuta does not expressly teach “a selected one of said plurality of group-based communication channels corresponding to one of said plurality of channel identifiers,” Kakuta renders these claim limitations obvious. For the same reasons set forth in Section IX.A.4, the first pane contains a drop-down option, allowing a user to select a channel identifier (#CH1).

210. When that channel identifier (#CH1) is selected from the drop-down, the second pane will then display the messaging communications associated with the users in CH1.

211. Moreover, it would be obvious that the “first pane” depicted in Figure 8 is a combo box (i.e., drop-down menu), and therefore, it is configured to display a plurality of items (i.e., more than one channel) from which the user chooses and to display messages within the selected channel among the interface. Thus, Kakuta renders these claim elements obvious to a PHOSITA.

d. Claim Elements 1[o], 15[n], and 25[n]

212. To the extent that the Patent Owner asserts that Kakuta does not expressly teach the “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[,]” Kakuta renders this claim obvious.

213. A PHOSITA would have understood that the second user-selectable control, which generates the subsidiary communication thread, would indicate which message within the broader communication channel serves as the anchor message for the thread. Kakuta discloses this through its “Display” tool, which acts as the second user-selectable control associated with the first messaging communication. This tool allows users to select a specific thread to display in the subsidiary communication thread (the third pane), with the first messaging communication being designated as the anchor message. Exh-1005 at 8:30–58;

9:23–31, FIGS. 7. For instance, Figure 12 demonstrates how the “Display” tool allows a user to select and display the “Program” thread, and Figure 7 shows the first communication message as the top-most, anchor message within the subsidiary thread, and establishing which message will serve as the anchor. Therefore, a PHOSITA would recognize that this user-selectable control inherently indicates the anchor message of the subsidiary communication thread, making this feature obvious in light of Kakuta’s teachings.

2. Claims 1, 3, 13, 15, 17, 23, 25, 27, and 28, and Dependent Claims 2-7, 9-14, 16-19, 21-24, and 26-29

214. To the extent the Patent Owner asserts that Kakuta does not expressly teach certain claim elements of independent claims 1, 15, and 25 (1[i], 1[p], 15[h], 15[o], 25[h], and 25[o]), it is my opinion that these elements are obvious in light of Kakuta. Anticipated claims 2-7 and 9-12 depend from claim 1⁴, anticipated claims 16-19 and 21-22 depend from claim 15⁵, and anticipated claims 26-27 depend from claim 25, so the analysis of these claim elements (1[i], 1[p], 3[a], 13[a], 15[h], 15[o], 17[a], 23[a], 25[h], 25[o], 27[a], and 28[a]) are incorporated by reference into these dependent claims, making claims 2-7, 9-12, 16-19, 21-22, and 26-27 also obvious. Moreover, this analysis is further incorporated into the obvious analysis of claims 13-14, 23-24, and 28-29 below (Section X.E).

⁴ Anticipated claims 4, 6-7, and 9 also depend from claim 3.

⁵ Anticipated claims 18-19 and 21 also depend from claim 17.

a. Claim Elements 1[i], 1[p], 3[a], 13[a], 15[h], 15[o], 17[a], 23[a], 25[h], 25[o], 27[a], and 28[a]

215. To the extent the Patent Owner asserts that Kakuta does not expressly teach “in response to a user selection” and/or “in response to user selection[,]” present in claim elements 1[i], 1[p], 3[a], 13[a], 15[h], 15[o], 17[a], 23[a], 25[h], 25[o], 27[a], and 28[a], Kakuta renders these claim limitations obvious.

216. Kakuta teaches that when a user selects a message, words within a message, or a user ID, and then selects the first user-selectable control, “Create,” a third pane appears that displays the selected (anchor) message or displays a private chat with only the selected users. Exh-1005 at 8:38–52, FIGS. 7 and 8. Thus, even if the response involves selecting both (1) the message, words within the message, or User ID, and (2) the “Create” tool, it is inherent that the final step of selecting “Create” triggers the display of the third pane with the anchor message.

217. Additionally, Kakuta teaches an immediate response to a user selection, where the “Create” tool can be used independently. *Id.* at 8:52–56. Therefore, based on the teachings of Kakuta, it would be obvious to apply this immediate response to any thread request when a user-selectable control is selected.

218. Furthermore, if an interim window, such as a “Confirmation Window” or similar interface (*see* FIG. 6), appears before the third pane is displayed with the first messaging communication and an associated sidebar text-entry field operable

to receive additional messaging input, it is inherent that this is part of the process (in response to the selection) that leads to the final display of the third pane, thereby rendering this aspect of the claim obvious as well. Thus, Kakuta renders these claim elements obvious to a PHOSITA.

B. Claim 4

219. To the extent the Patent Owner asserts that Kakuta does not expressly teach “displaying said third user-selectable control proximate to said additional messaging communication[,]” Kakuta renders this claim limitation obvious.

220. For example, Kakuta teaches that the selection of messages or users allows for actions associated with these additional messages or users, such as generating a simultaneous subsidiary thread window displaying those messages. Exh-1005 at 8:43–51, FIGS. 5 and 8. This selection process works in tandem with the tools on toolbar 305 (i.e., the user-selectable controls). *See id.* Consequently, these messages and user selections are naturally proximate to the additional messaging communications when the user-selectable control is invoked. *See id.*

221. It is obvious that the user-selectable control, when used in this context, would be displayed close to the additional messaging communications to ensure efficient and intuitive interaction. Moreover, the proximity of the control to the selected messages enhances usability, making the process straightforward and logical for the user. Thus, it is my opinion that Kakuta renders this limitation

obvious because the design and functionality of the system inherently suggest that the user-selectable control would be positioned near the additional messaging communications, enhancing efficient interaction and aligning with standard user interface practices. Moreover, the toolbar (305) containing the user-selectable functions, is movable as illustrated in the images, making it obvious to move the tool bar to make it proximate. *See id.* at FIGS. 4–6. Thus, Kakuta renders this claim obvious to a PHOSITA.

C. Claims 9 and 21

222. To the extent the Patent owner asserts that Kakuta does not expressly teach “a fourth user-selectable control operable to cause the display of at least a portion of said subsidiary communication thread in said third pane[,]” Kakuta renders this claim limitation obvious.

223. There is a fourth user-selectable control. The “fourth user-selectable control” is the selection of a user ID (i.e., identifying information) that is associated with an anchor message. This selection is “operable to cause” the display of at least a portion of said subsidiary-communication thread because the selection influences the behavior of the information that is included in the selection window (*see* Exh-1005 at FIG.16 (Step 351), 12:15–18) and therefore determines what information is displayed in the third pane. Upon selecting the “Create” tool (*Id.* at FIG. 5, 8:11–12.), a user may initiate a new subsidiary thread (i.e., a third

pane) that quotes the messages, including the anchor message, which is then generated and displayed to the user. *Id.* at 8:20–37, FIGS. 6 and 7.

224. Thus, the act of selecting a user ID to influence which messages are displayed in the third pane is a clear example of how the user-selectable control is “operable to cause” the desired display. The inherent functionality in Kakuta’s display control device makes this process obvious, as it logically follows from the user’s interaction with the controls, thereby rendering these claims obvious. Thus, Kakuta renders these claims obvious to a PHOSITA.

D. Claim 12

225. To the extent the Patent Owner asserts that Kakuta does not expressly teach Claim 12, Kakuta renders Claim 12 obvious. For example, Kakuta teaches the ability to manage user access and participation within a channel, including the joining and departing of users, changes in channel settings, and the control of who can participate in specific threads. *Id.* at 11:4–13. The creation module, in conjunction with the reporting module, processes these adjustments and updates the administration table accordingly, allowing the system to dynamically manage user participation and access. *Id.* at 7:6–10, 7:11–22.

226. Moreover, Kakuta’s disclosure of thread creation commands, which include parameters such as thread ID, user list, and the ability to set threads as “Private,” inherently suggests a flexible system capable of handling requests for

non-member access to specific communications. *Id.* at 7:11–22. Thus, it is my opinion that the same mechanisms used to control thread visibility and user participation could be employed to grant access to non-member users, making the extension of these capabilities to include non-member access an obvious next step in the display device’s design. Thus, Kakuta renders this claim obvious to a PHOSITA.

E. Claims 13, 14, 23, 24, 28, and 29

1. Dependent Claim 13

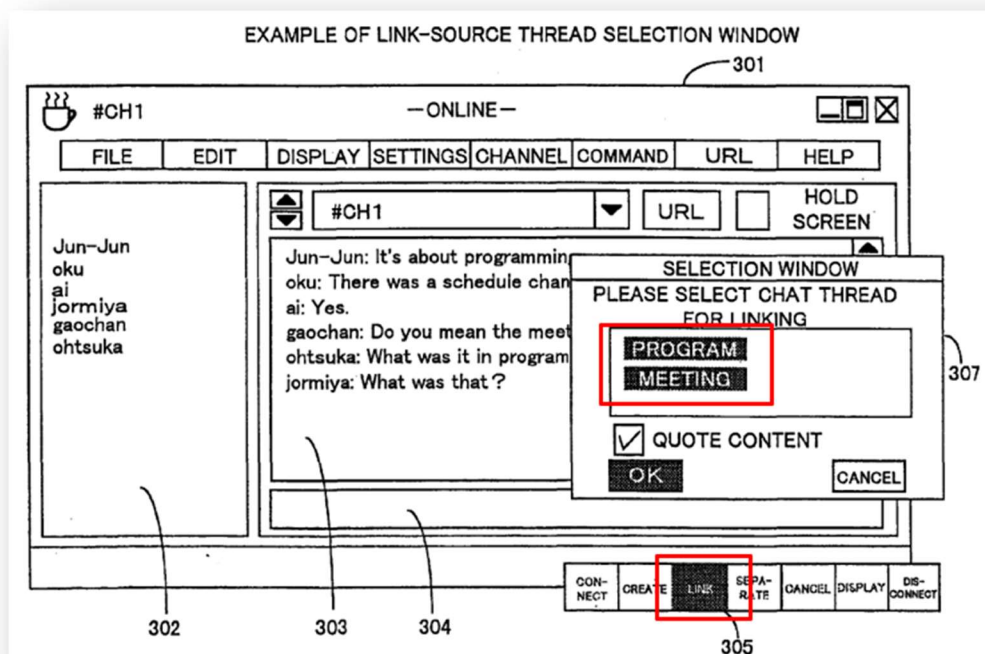
- a. 13[pre] The apparatus of claim 1, further comprising instructions for displaying a fifth user-selectable control, said control being operable to:**

227. It is my opinion that Kakuta this claim is obvious over Kakuta. First, Kakuta discloses the apparatus of claim 1 limitation, as described above, and is incorporated by reference. *See* Sections IX.A, X.A, *supra*. Second, Kakuta teaches a fifth user-selectable control.

228. Kakuta describes various user-selectable controls within a thread window, such as “Create,” “Display,” “Link,” “Separate,” “Connect,” “Cancel,” and “Disconnect,” which are available among “toolbar 305” when interacting with messaging communications and user IDs. Exh-1005 at FIG. 4, 8:30–58. Although Claim 13 requires a *fifth* user-selectable control, it depends solely on Claim 1, which includes only a “first user-selectable control” and a “second user-selectable control.” Therefore, the “third user-selectable control” and “fourth user-selectable

control” could be the user-selectable controls identified in Claims 3 or 9, or it could be the other user-selectable controls available, such as the separate, cancel, or disconnect controls. *See* Sections IX.C, IX.H. Requiring a fifth user-selectable control that is not associated with the third or fourth user-selectable control supports the notion that the numbering of each user-selectable control is relatively arbitrary, so any of the various user-selectable controls within toolbar 305 could fulfill the user-selectable control limitations, rendering them anticipated. *See* Exh-1005 at FIG. 4, 8:30–58.

229. For example, Kakuta teaches a “fifth user-selectable control,” the selection “Link” to link the “Program” and “Meeting” threads together. *Id.* at 8:59–9:4, FIG. 10. Figure 10 illustrates this:



Id. at FIG. 10 (annotations added). Thus, Kakuta renders this claim element obvious to a PHOSITA.

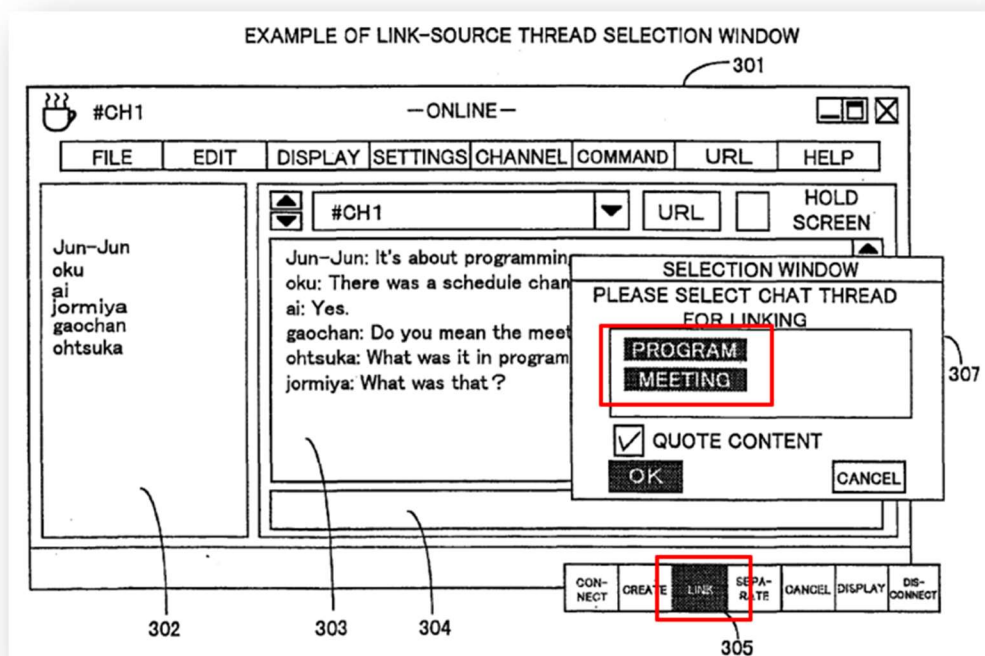
- b. 13[a] in response to user selection of said fifth user-selectable control, selectively display messaging communications having a specific type associated with said selected fifth user-selectable control, said messaging communications being from at least two separate group-based communication channels.**

230. It is my opinion this limitation is obvious over Kakuta. With respect to the limitation “in response to user selection[,]” Kakuta renders this limitation obvious as described above and is incorporated by reference. *See* Section X.A.2.a, *supra*. Kakuta teaches a “fifth user-selectable control” that displays messaging communications from at least two separate group-based channels. The “fifth user-selectable control” is the selection of “Link” and selecting “Program” and “Meeting,” which are associated with a specific type of messages corresponding to those threads. *See id.* at 8:59–9:4, FIG. 10.

231. A PHOSITA would understand that at least one option for the channel drop-down combo box displayed in the first pane (*see* Section IX.A.4) would be for the combo box to serve as a filter of the channel(s) displayed in the second pane. Thus, when #CH1 is selected (as shown in Kakuta’s FIG. 10 above), the second pane would show only messages within #CH1 (i.e., within channel 1). But a PHOSITA would also understand that when no filter was selected (e.g., the combo box displays a filter value “#ALL” or a blank value) the second pane would

show messages from all available channels. *See* Exh-1015 at p. 38 (illustrating an example drop-down menu option for “All Users”). And displaying messages from all available channels in the second pane would allow selecting multiple threads (such as the “Program” and “Meeting” threads) from at least two separate group-based communication channels. When two such threads are linked, they are displayed in the third pane *See id.*

232. Figure 10 illustrates a user invoking the “Link” tool and choosing at least two different threads with specific messages from the “Program” and “Meeting” threads.



Id. at FIG. 10 (annotations added). Thus, Kakuta renders this claim element obvious to a PHOSITA.

2. 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.

233. It is my opinion that this limitation is obvious over Kakuta. First, Kakuta discloses the apparatus of claim 13 limitation, as described above, and is incorporated by reference. *See* Section X.E.1, *supra*. Second, Kakuta teaches a class of messaging communications in which the messaging communications are all parts of a subsidiary thread that incorporates messages from a specific user of the system.

234. For example, Kakuta teaches the ability to select messages from a specific user, creating a thread consisting entirely of that user's messages. Exh-1005 at 8:38–42. These messages can then be linked using the “Link” tool to create a subsidiary thread that encompasses all messaging communications from a specific user among all subsidiary threads. *Id.* at 8:59–65. When these threads are selected, then they will be forwarded to the third pane. *Id.* at 8:65–9:4.

235. Moreover, Kakuta discloses that once threads are linked, the system can organize the display of messages in various ways, such as by time sequence or user-and-time sequence, to meet specific needs. *Id.* at 9:1–4. This flexibility indicates that the system inherently supports the organization of messages by specific users within subsidiary threads. It would be obvious to extend this

functionality to create a class of messaging communications that are all parts of subsidiary threads generated by a particular user. The ability to link, categorize, and display messages based on user input and thread associations in Kakuta naturally leads to the conclusion that such a system would be capable of meeting the requirements of Claim 14, rendering this limitation obvious. *Id.* at 8:59–9:4, FIG. 10. Thus, Kakuta renders this claim obvious to a PHOSITA.

3. Dependent Claim 23

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

236. It is my opinion that this limitation is obvious over Kakuta, as described above, which is incorporated by reference. *See* Sections IX.L, X.A, X.E.1.a, *supra*.

- b. **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.**

237. It is my opinion that this limitation is obvious over Kakuta, as described above, which is incorporated by reference. *See* Section X.E.1.b, *supra*.

4. 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.

238. It is my opinion that this limitation is obvious over Kakuta, as described above, which is incorporated by reference. *See* Sections X.E.2, X.E.3, *supra*.

5. Dependent Claim 28

- a. 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:**

239. It is my opinion that this limitation is obvious over Kakuta, as described above, which is incorporated by reference. *See* Sections IX.S, X.A, X.E.1.a, *supra*.

- b. 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.**

240. It is my opinion that this limitation is obvious over Kakuta, as described above, which is incorporated by reference. *See* Section X.E.1.b, *supra*.

6. 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.

241. It is my opinion that this limitation is obvious over Kakuta, as described above, which is incorporated by reference. *See* Section X.E.2, X.E.5, *supra*.

F. Claim 30

1. Claim Element 30[d]

242. To the extent the Patent Owner asserts that Kakuta does not expressly teach the “in response” and “proximate” portions of Claim Element 30[d], Kakuta renders Claim Element 30[d] obvious, as described above, which is incorporated by reference. *See* Sections X.A.2.a (“in response”) and X.B (“proximate”), *supra*.

243. To the extent the Patent Owner asserts that Kakuta does not expressly teach a “thread summary indicator” as required by Claim Element 30[d], Kakuta renders Claim Element 30[d] obvious. It would be obvious to integrate the “Display” tool with the selection of the desired thread into a single step to streamline the user experience, effectively functioning as a unified “thread summary indicator.” Modern user interfaces prioritize efficiency, and combining the selection of a messaging communication with the “Display” tool in a single action would be a natural design improvement. This integration would enable the user to invoke the display of a subsidiary communication thread with one step, directly within the message pane and near the first messaging communication (i.e., anchor message). Such an approach would enhance simplicity and usability,

aligning with common interface design practices, making it clear that this modification is an obvious evolution of the system disclosed in Kakuta.

XI. GROUND 3: CLAIMS 1-7, 9-19, AND 21-29 ARE OBVIOUS OVER KAKUTA IN VIEW OF MATSUMOTO

A. Claims 1, 15, and 25 and Dependent Claims 2-7, 9-14, 16-19, 21-24, and 26-29 Are Obvious Over Kakuta In View of Matsumoto

244. To the extent the Patent Owner asserts that Kakuta does not expressly teach or render obvious certain claim elements of independent claims 1, 15, and 25 (1[c], 15[b], and 25[b]), it is my opinion that these elements are obvious over Kakuta in view of Matsumoto. As noted above, dependent claims 2-7, 9-14, 16-19, 21-24, and 26-29 are anticipated and/or obvious in view of Kakuta (Sections IX and X), and the analysis of these claim elements (1[c], 15[b], and 25[b]) are incorporated by reference into the dependent claims.

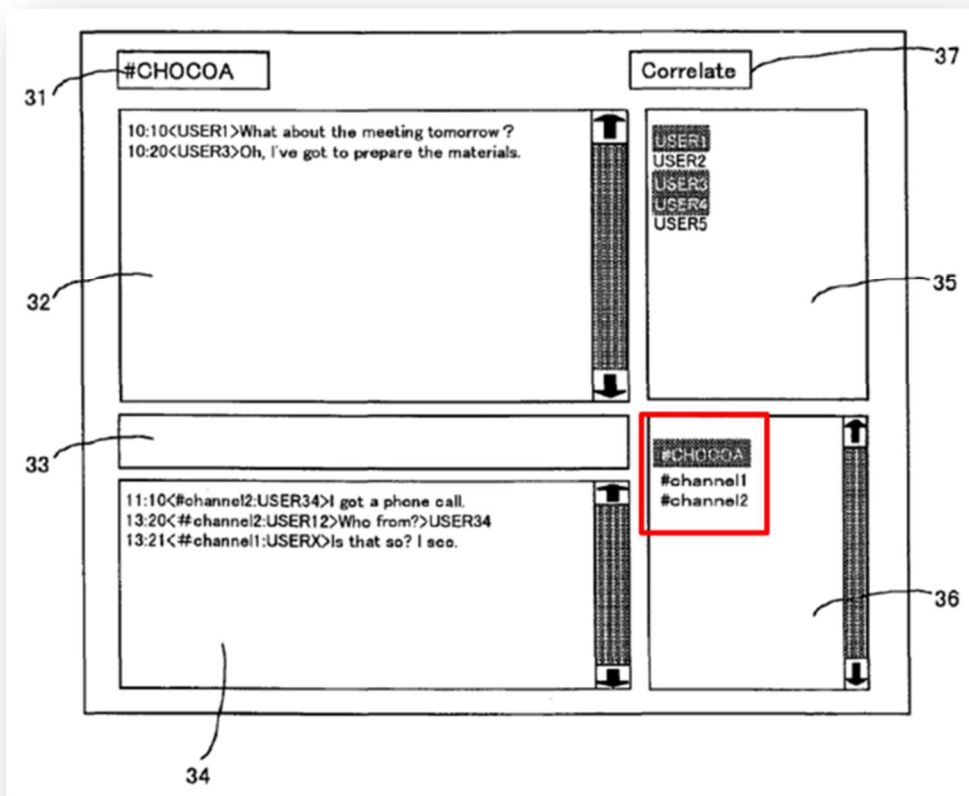
1. Claim Elements 1[c], 15[b], and 25[b]

245. To the extent the Patent Owner asserts that Kakuta does not expressly teach or render obvious the claim limitation “a first pane configured to display a plurality of channel identifiers,” Kakuta in view of Matsumoto renders these claim limitations obvious.

246. It is my opinion that Kakuta anticipates and/or renders this limitation obvious, as described above, which is incorporated by reference. *See* Sections IX.A.4, IX.L.3, IX.S.3, and X.A.1.b, *supra*. Moreover, the remaining elements of claim 1 (1[pre]–1[b] and 1[d]–1[p]), 15 (15[pre]–15[a] and 15[c]–15[o]), and 25

(15[pre]–15[a] and 15[c]–15[p] are anticipated and/or rendered obvious by Kakuta, as described above, which is incorporated by reference. *See* Sections IX.A, IX.L, IX.S, and X.A, *supra*.

247. Matsumoto explicitly teaches the use of multiple channels (i.e., channel identifiers), each with specific information such as “channel name, topic, users participating in the channel and departed users, mode, channel administrator, etc.” Exh-1006 at 7:46–48. Matsumoto discloses a chat screen that displays a “main channel window 31, a main chat window 32, an input window 33, a sub-chat window 34, a user window 35, and a ***channel window 36***.” *Id.* at 9:31–34. (emphasis added). “The channel window 36 displays the names of channels in which the IRC client 2 is participating.” *Id.* at 9:44–46. For example, Figure 3 clearly shows a list of multiple channel identifiers in the channel window 35 for the user to choose from.



Id. at FIG. 3 (highlighting the plurality of channel identifiers).

248. It would be obvious to combine Matsumoto's plurality of channel identifiers displayed in the channel window 36 with Kakuta's user interface. Instead of using a drop-down menu, Kakuta's device could be enhanced by directly listing multiple channels in the first pane, as Matsumoto demonstrates. This combination would provide an intuitive and efficient way for users to view and select among various channels, rendering the claim limitation obvious.

B. Dependent Claim 13

1. Claim Element 13[pre]

249. It is my opinion that this claim is obvious over Kakuta, as described above, and is incorporated by reference. *See* Sections X.A, X.E.1.a, *supra*.

2. Claim Element 13[a]

250. It is my opinion this limitation is obvious over Kakuta in view of Matsumoto. First, Kakuta teaches the use of various tools (i.e., user-selectable controls) among “toolbar 305,” including linking messages within a channel. *See* Section X.A.1.c, X.E.1.b, *supra*. To the extent that the Patent Owner contends that Kakuta does not link messages across channels, Kakuta in view of Matsumoto clearly renders this claim obvious.

251. Matsumoto teaches “channel correlation” where a user may transfer/forward messages from one channel to another and set forth specific conditions (i.e., filtering) based on which messages among the origin channel are to be transferred/forwarded to the destination channel. Exh-1006 at 2:65-3:4, 17:25–31, FIG. 19, Claim 1. As disclosed in Figure 17, messages are correlated and displayed on two channels when all messages are sent in both directions to channels. *Id.* at 16:42-50.

252. These “sending conditions” can be tailored towards specific types of messages based on keywords, usernames, etc. *Id.* at 3:51–55 (“Consider a case in which the keyword ‘#CUSTOMER*’ is registered in the condition table’s sending

conditions. If there is a message beginning with the character string ‘#CUSTOMER,’ the decision means decides to send that message to the correlated destination channel”); *id.* at 3:60–63 (“For example, nicknames ‘user-A; user-B’ are registered in the condition table’s sending conditions. If there is a message from ‘user-A’ or ‘user-B,’ the decision means decides to send the message.”). The messages are then sent from the origin channel to the destination channel after the user selects the “Correlate” button. *See e.g., id.* at FIG. 5.

253. Matsumoto also teaches that users can create filters that automatically transfer/forward messages across channels, disclosing a single filter-designation channel can contain messages from multiple channels. *See id.* at 16:51-65; FIGS. 18-19; *see also id.* at 8:19-25.

254. Kakuta inherently discloses the ability to select a channel (using the channel drop-down box, *see* Section IX.A.4), and when this is done and the user selects the destination channel of Matsumoto’s filters, the user will see messages that originate from a multitude of different channels. Thus, the fifth user-selectable control is the Matsumoto filter-destination channel represented in Kakuta’s channel selector drop-down box.

255. A PHOSITA would have understood that integrating Matsumoto’s filter-destination channel into the functionality provided by Kakuta would be a

simple and routine matter. Thus, Kakuta in view of Matsumoto discloses this claim element.

C. Dependent Claim 14

256. It is my opinion that this limitation is obvious over Kakuta in view of Matsumoto. First, Kakuta in view of Matsumoto discloses the apparatus of claim 13, as described above, and is incorporated by reference. *See* Sections X.E.2, XI.B, *supra*. Second, Matsumoto teaches “sending conditions” where messages from specific users may be designated to be transferred/forwarded from an origin channel to a destination channel upon a user’s selection of the “Correlate” button. Exh-1006 at 3:60–63 (“For example, nicknames ‘user-A; user-B’ are registered in the condition table’s sending conditions. If there is a message from ‘user-A’ or ‘user-B,’ the decision means decides to send the message.”); *see e.g., id.* at FIG. 5. Matsumoto also discloses the transfer of messages from multiple origin channels to a single destination channel. *Id.* at FIG. 9(a).

257. Third, Kakuta teaches displaying a subsidiary thread communication channel window that can present subsidiary threads to the user upon selection of a tool (i.e., user-selectable control) among the “toolbar 305.” Exh-1005 at FIGS. 7, 16. This allows the user to view and interact with specific subsidiary communication threads based on messages from certain threads. *See id.*

258. A POSITA would understand that combining Kakuta’s functionality for managing and displaying subsidiary threads with Matsumoto’s “sending conditions” would naturally result in a system where messaging communications from specific users are organized into subsidiary threads. Matsumoto’s ability to selectively transfer messages based on user-specific criteria and Kakuta’s thread management tools provide a seamless integration, allowing for the creation of user-based subsidiary threads within the messaging platform. This would make it obvious to create a system where messaging communications from specific users are grouped into subsidiary communication threads. Thus, Kakuta in view of Matsumoto discloses this claim.

D. Dependent Claim 23

1. Claim Element 23[pre]

259. It is my opinion that this limitation is obvious over Kakuta in view of Matsumoto, as described above, which is incorporated by reference. *See* Sections X.E.3.a, XI.A, XI.B.1, *supra*.

2. Claim Element 23[a]

260. It is my opinion that this limitation is obvious over Kakuta in view of Matsumoto, as described above, which is incorporated by reference. *See* Section X.E.3.b, XI.B.2, *supra*.

E. Dependent Claim 24

261. It is my opinion that this limitation is obvious over Kakuta in view of Matsumoto, as described above, which is incorporated by reference. *See* Section X.E.4, XI.C, XI.D, *supra*.

F. Dependent Claim 28

1. Claim Element 28[pre]

262. It is my opinion that this limitation is obvious over Kakuta in view of Matsumoto, as described above, which is incorporated by reference. *See* Section IX.S, X.A, X.E.5.a, XI.A, XI.B.1, *supra*.

2. Claim Element 28[a]

263. It is my opinion that this limitation is obvious over Kakuta in view of Matsumoto, as described above, which is incorporated by reference. *See* Section E.E.5.b, XI.B.2, *supra*.

G. Dependent Claim 29

264. It is my opinion that this limitation is obvious over Kakuta in view of Matsumoto, as described above, which is incorporated by reference. *See* Section E.E.6, XI.F, XI.C, *supra*.

XII. GROUND 4: CLAIMS 1-29 ARE OBVIOUS OVER KAKUTA IN VIEW OF MATSUMOTO AND CHANG

A. Claims 1, 15, and 25 and Dependent Claims 1-14, 16-24, and 26-29

265. To the extent the Patent Owner asserts that Kakuta does not expressly teach or render obvious certain claim elements of independent claims 1, 15, and 25

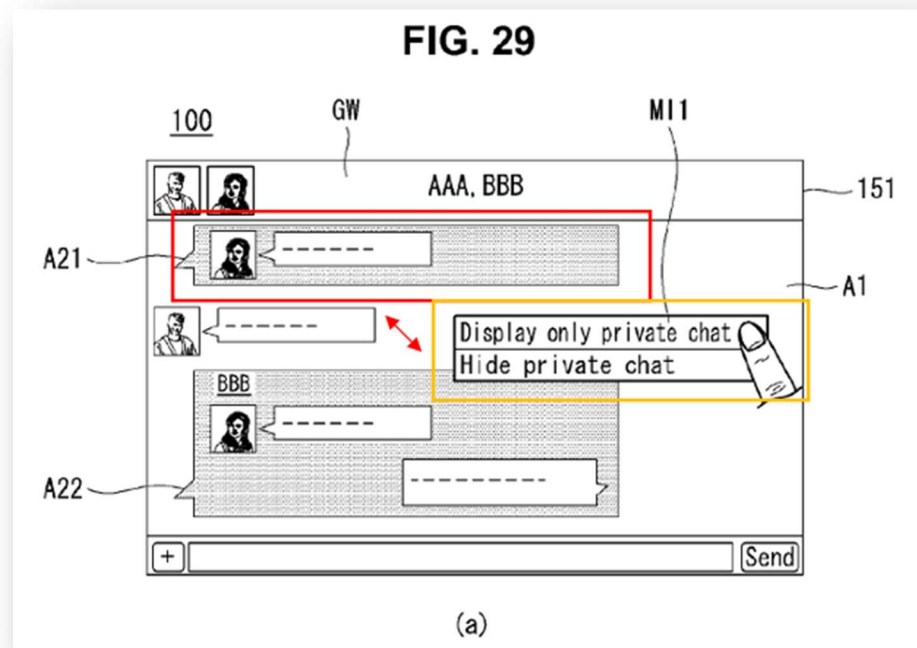
(1[o], 15[n], and 25[n]), it is my opinion that these elements are obvious over Kakuta in view of Matsumoto and Chang. As noted above, dependent claims 2-7, 9-14, 16-19, 21-24, and 26-29 are anticipated and/or obvious in view of Kakuta or Kakuta in view of Matsumoto (Sections IX, X, XI), and the analysis of these claim elements (1[o], 15[n], and 25[n]) are incorporated by reference into the dependent claims. Moreover, the analysis of these claim elements are also incorporated into claims 8 and 20, discussed below (Section XII.C).

1. Claim Elements 1[o], 15[n], and 25[n]

266. To the extent the Patent Owner asserts that Kakuta does not expressly teach or render obvious the claim limitation “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,” Kakuta in view of Matsumoto and Chang renders this claim limitation obvious.

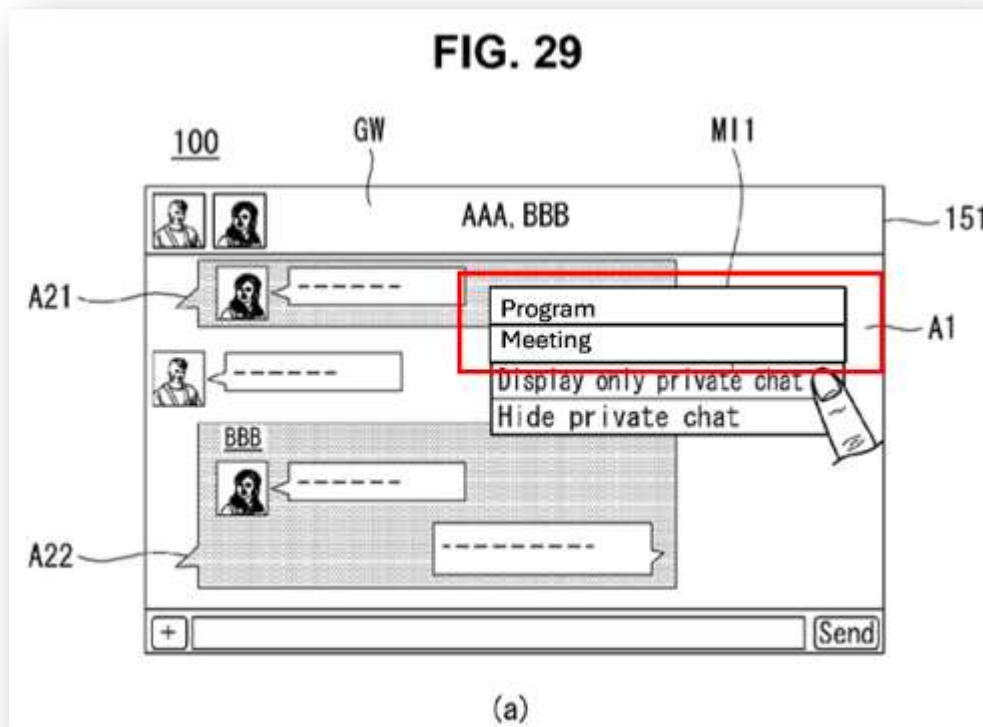
267. Chang teaches that when each message, such as a message among private chat area A21, as shown in FIG. 29 below, “is touched for a predetermined time period or more, the controller 180 controls to display selectable menu items related to a display function of the private chat areas A21” Exh-1007 at [0270].

268. This selectable menu acts as the second user-selectable control associated with the first messaging communication in the second pane, as it is triggered when the user selects the private chat area A21, which includes the first messaging communication. *Id.* at [0203], [0296], [0299], [0318]. The second user-selectable control is linked to an indicator showing that the first messaging communication serves as the anchor message of the subsidiary communication thread. This is visually represented by the first messaging communication being enclosed within the private chat area A21, signifying its role as the anchor message for the private subsidiary communication thread.



Id. at FIG. 29 (where A21 is the private chat region encompassing the first message communication/anchor message and a selectable item menu is displayed); *see also id.* at [0270].

269. A PHOSITA would have found it obvious to combine the Kakuta and Matsumoto (*see* Sections XI.A) device with Chang's second user-selectable control (i.e., the selectable menu) associated with an indicator that the first messaging communication is the anchor message. Integrating Chang's second user-selectable control into the second pane of Kakuta would enable the invocation of a subsidiary communication thread in the third pane, where the first messaging communication would function as the anchor message. This combination would allow certain functions associated with Kakuta's toolbar (such as "Display", and the "Program" and "Meeting" thread indicators) to be incorporated into the selectable menu. That is, the selectable menu would include options for selecting each of the threads associated with each message (*see* combination image below, where the message is associated with both the "Program" and "Meeting" threads).



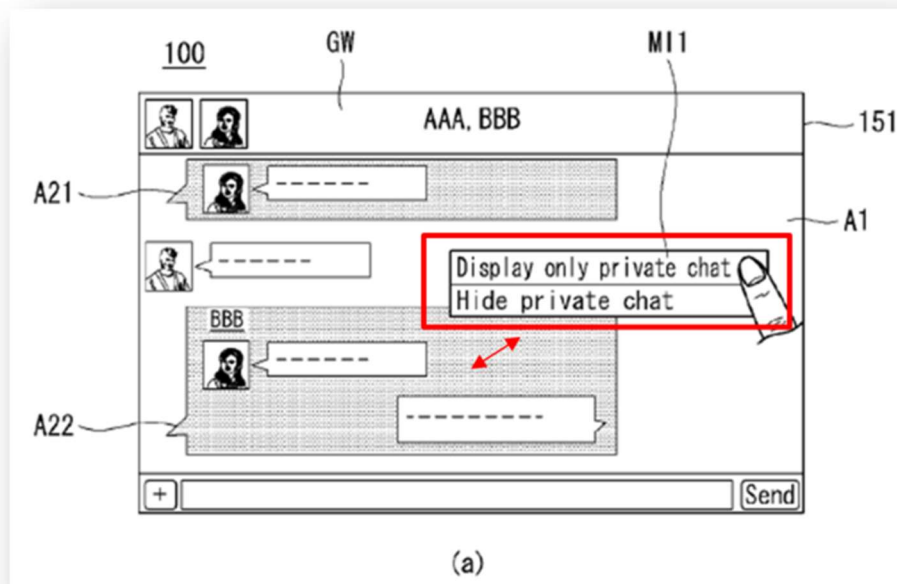
Id. at FIG. 29 (combination image depicting an example selectable menu with a selection of each thread.).

270. Therefore, a PHOSITA would understand this claim limitation to be obvious based on Kakuta, Matsumoto, and Chang's teachings.

B. Claim 4

271. To the extent the Patent Owner asserts that Kakuta does not expressly teach or render obvious the claim limitation "displaying said third user-selectable control proximate to said additional messaging communication[,]" Kakuta in view of Matsumoto and Chang renders this claim limitation obvious.

272. Chang teaches a mobile terminal where a user may select a private chat area by invoking a user control. Exh-1007 at [0032]; FIG. 29. In Figure 29, Chang shows a user-selectable control placed directly near the messaging communication, allowing the user to open a private subsidiary chat window from within a group chat interface. This illustrates the concept of displaying a control near the communication it operates on, making it accessible and immediately relevant to the user's action.



Id. at FIG. 29 (annotations added highlighting the selectable item (i.e., user-selectable control) and its proximity to the message communications among the group chat interface).

273. Chang teaches that when the message thread is touched for a predetermined period of time, the user control (display or hide a private chat)

appears. *Id.* at [0270]. Chang further teaches that other user-selectable controls become available when a party presses on the chat for a predetermined amount of time, including adding a member to the chat, separating a chat window, copying a chat from one window to another. *Id.* at [0203], [0296], [0299], [0318].

274. Combining the Kakuta and Matsumoto device (Sections IX.D, X.B, and XI.A) with Chang's proximity-based user controls, it would be obvious that the third, or really any, user-selectable control in Kakuta could be placed near the additional messaging communication it governs. This combination would enhance user experience by ensuring that controls are logically and spatially related to the communications they affect, facilitating efficient interaction with messaging threads.

275. It is my opinion that Kakuta anticipates and/or renders the remaining elements of this claim limitation obvious (obvious alone or in light of Matsumoto), as described above, which is incorporated by reference. *See* Sections IX.A-D, X.A-B, XI.A, *supra*. Thus, this claim element is obvious.

C. Claims 8 and 20

1. Claim 8

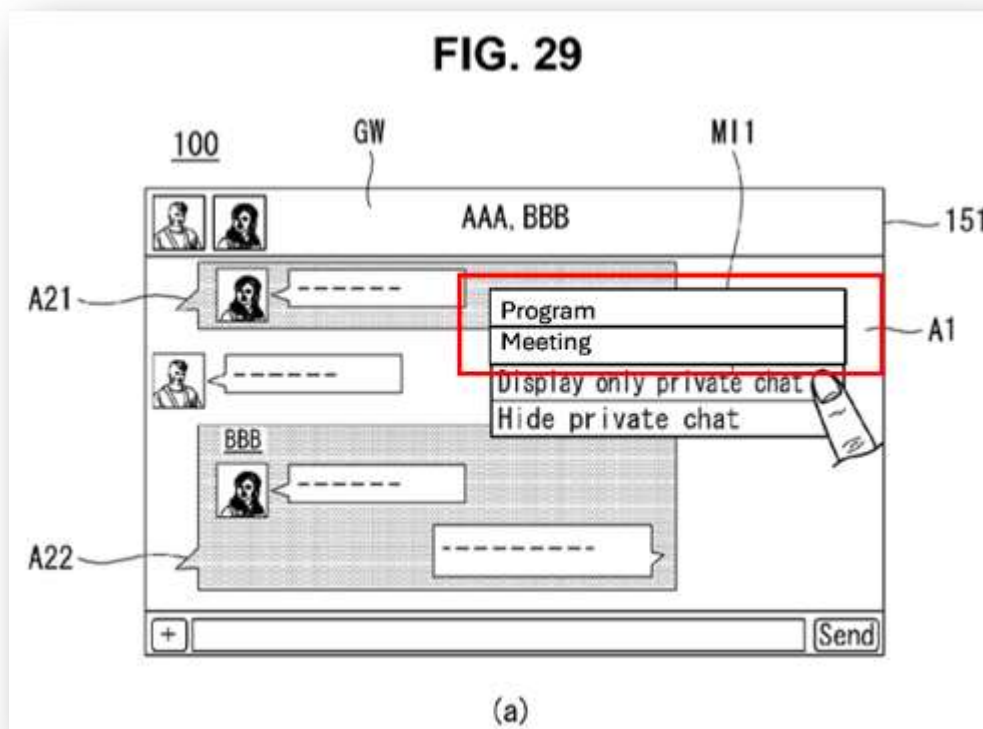
The apparatus of claim 3, wherein, displaying said additional messaging communication in said second pane comprises, while said additional messaging communication is displayed in said second pane, displaying an indicator identifying said additional messaging communication as associated with a subsidiary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

276. It is my opinion that Kakuta in combination with Matsumoto and Chang renders this claim limitation obvious. Kakuta discloses or renders obvious the apparatus of claim 3, as described above, and is incorporated by reference. *See* Sections IX.B, X.A, *supra*.

277. Second, as disclosed above, Kakuta teaches a second pane with additional messages that can be displayed within a messaging pane (second pane) and a subsidiary communication thread (third pane). *See* Section IX.B.

278. Chang teaches that when each message, such as a message among private chat area A21 “is touched for a predetermined time period or more, the controller 180 controls to display selectable menu items related to a display function of the private chat areas A21” Exh-1007 at [0270].

279. A PHOSITA would have found it obvious to combine the Kakuta and Matsumoto device (Section IX.C, IX.N, X.A, XI.A) with Chang’s selectable menu, thereby incorporating an indicator associated with a message, such as the additional messaging communication. As discussed above, this combination would allow certain functions associated with Kakuta’s toolbar (such as “Display”, and the “Program” and “Meeting” thread indicators) to be incorporated into the selectable menu. That is, the selectable menu would include options for selecting each of the threads associated with each message (*see* combination image below, where the message is associated with both the “Program” and “Meeting” threads).



Id. at FIG. 29 (combination image depicting an example selectable menu with a selection of each thread.). Thus, this would indicate to a user that the additional messaging communication among the second pane is associated with a subsidiary communication thread, such as “Program” or “Meeting,” that can be displayed among the third pane.

280. It is my opinion that Kakuta anticipates and/or renders the remaining claim limitations obvious (obvious alone or in light of Matsumoto), as described above, which is incorporated by reference. *See* Sections IX.A-C, X.A, XI.A.1, *supra*. Thus, Kakuta in view of Matsumoto and Chang renders this claim obvious.

2. 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.

281. It is my opinion that this limitation is obvious over Kakuta in view of Matsumoto and Chang, as described above, which is incorporated by reference.

See Sections XII.C.1, X.A.2, IX.N, *supra*.

D. Claim 12

282. To the extent the Patent Owner asserts that Kakuta does not expressly teach and/or obvious the claim limitation “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” of Claim 12, Kakuta in view of Matsumoto and Chang renders this claim limitation obvious.

283. Chang teaches the receipt of a request to add a non-member to a chat, and in response, adding the non-member user who can then receive communications. Exh-1007 at [0276]–[0285]. In particular, Chang discloses: “when a request for adding another party is received, the controller 180 controls to

display a list L of another parties that can be added in a partial area of the screen. Thereafter, when another party L1 included in the list L is touched and dragged to a chat window by the user, the controller 180 selects a chat group based on a position at which another party L1 is dragged.” *Id.* at [0281]–[0282]; FIGS. 31–32.

284. Combining the Kakuta and Matsumoto device (Section IX.K, X.A, X.D) with Chang’s feature to add a non-member to a communication thread, it would be obvious to receive a request to permit a non-member user not associated with the group and, in response to the request, enabling said non-member user to receive such communications. This combination would enhance user experience by ensuring that controls are logically and spatially related to the communications they affect, facilitating efficient interaction with messaging threads.

285. It is my opinion that Kakuta anticipates and/or renders the remaining claim limitations obvious (obvious alone or in light of Matsumoto), as described above, which is incorporated by reference. *See* Sections IX.A, IX.K, X.A, D, XI.A, *supra*. Thus, this claim element is obvious.

XIII. GROUND 5: CLAIM 30 IS OBVIOUS OVER KAKUTA IN VIEW OF CHANG

A. Claim 30

1. Claim Element 30[d]

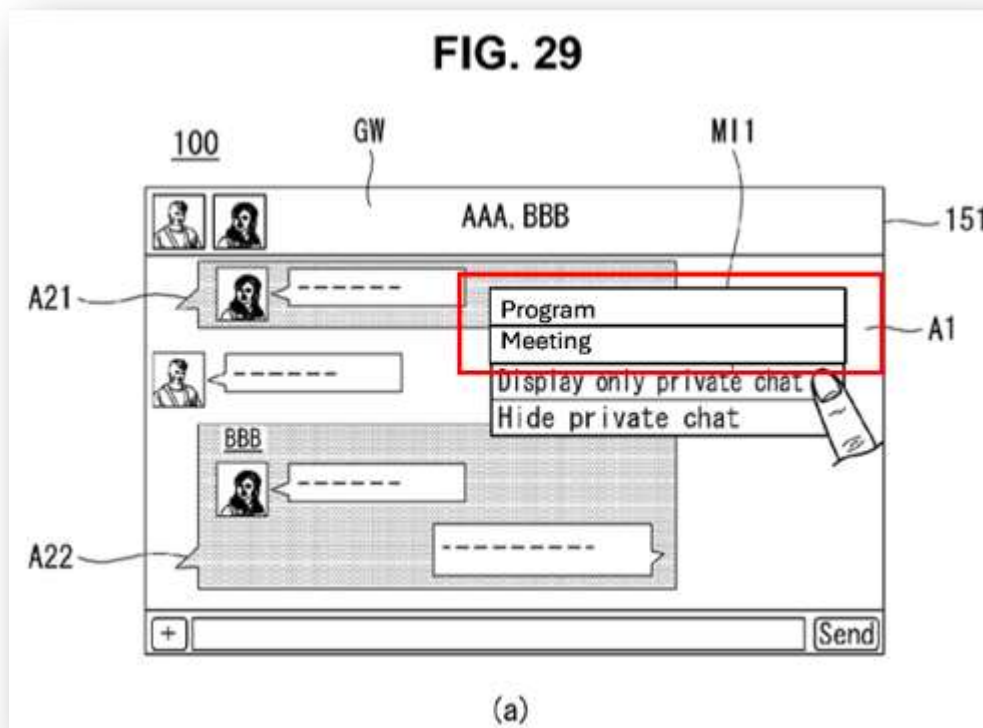
286. To the extent the Patent Owner asserts that Kakuta does not expressly teach and/or renders obvious the claim limitation “in response to receiving the thread request, generating and transmitting for display a thread summary indicator renderable within the messaging pane proximate the first messaging communication, wherein the thread summary indicator is configured to be selectable by a user with access to the first messaging communication[,],” of Claim 30, Kakuta in view of Chang renders this claim element obvious.

287. It is my opinion that Kakuta renders this limitation obvious, as described above, and is incorporated by reference. *See* Section X.F, *supra*.

288. Chang teaches that when each message, such as a message among private chat area A21 “is touched for a predetermined time period or more, the controller 180 controls to display selectable menu items related to a display function of the private chat areas A21” Exh-1007 at [0270].

289. A PHOSITA would have found it obvious to combine the Kakuta and Matsumoto device (Section XI.A) with Chang’s selectable menu, thereby incorporating an indicator associated with a message, such as the first messaging communication. As discussed above, this combination would allow certain

functions associated with Kakuta's toolbar (such as "Display", and the "Program" and "Meeting" thread indicators) to be incorporated into the selectable menu. That is, the selectable menu would include options for selecting each of the threads associated with each message (*see* combination image below, where the message is associated with both the "Program" and "Meeting" threads).



Id. at FIG. 29 (combination image depicting an example selectable menu with a selection of each thread.). Thus, this would serve as a thread summary indicator, renderable within the messaging pane and proximate the first messaging communication, indicating to a user that the first messaging communication among the second pane is associated with a subsidiary communication thread, such as

“Program” or “Meeting,” that can be displayed among the third pane upon user selection.

290. Thus, Kakuta in view of Chang renders this claim element obvious.

XIV. MOTIVATION TO COMBINE KAKUTA, MATSUMOTO, AND/OR CHANG

291. A summary of Kakuta, Matsumoto, and Chang are provided above in Section VIII. A PHOSITA would have been motivated to combine Kakuta with Matsumoto and/or Chang for numerous reasons.

292. First, all three references are in the same field of messaging. Exh-1005 at Abstract (“The disclosure is directed to methods and devices for displaying conversations on a network for ease of viewing in accordance with user preferences.”); Exh-1006 at Abstract (“Meanwhile, messages from ‘USER1, USER3, USER4’ can be displayed on message origin channel #CHOCOA or not displayed.”); Exh-1007 at Abstract (“displays a group chat area for displaying a group message transmitted to or received from a plurality of another parties and a private chat area for displaying a private message transmitted to or received from one of the plurality of another parties within one chat window.”).

293. All three references address messages over a network with a plurality of users. Exh-1005 at 1:66-2:3 (“In order to address the aforementioned problems, in one aspect the present invention is a display control method utilized in a chat system in which users on information terminals share identical networks mutually,

enabling text conversation....”); Exh-1006 at 2:45-48 (“the invention in the present application provides a chat sending system used in a communication system in which users share the same network and can chat, and for content display of chat on the network”); Exh-1007 at [0046] (“the wireless communication unit 110 may include a broadcast receiving module 111, a mobile communication module 112, a wireless Internet module 113, a local area (or short-range) communication module 114, and a location information (or position-location) module 115.”), [0116] (“a group of users chatting using a message transmitted and/or received using the mobile terminal 100 is referred to as a ‘chat group.’”),

294. All three references focus on allowing users to segregate messages, creating a separate message thread, to allow for more efficient communication. Exh-1005 at 1:61-65 (“The object of the present invention is to display topics respectively segregated from other topics wherein a plurality of topics are under way simultaneously on a network, to promote accurate and efficient communication.”); Exh-1006 at Abstract (“In response to the foregoing needs, an object of the present invention is to provide technology for sharing and segregating communications in a virtual space so that a plurality of users sharing a virtual space for simultaneous text-based communication may converse without confusion while sharing a plurality of topics.”); Exh-1007 at [0009] (“An aspect of the present invention is to provide a mobile terminal and a method for displaying a

message thereof that can improve user convenience when simultaneously performing group chat and private chat using a message.”).

295. A PHOSITA would have looked to Matsumoto for its specific teachings relating to the display of multiple channels. In particular, Kakuta discloses that its display control device includes a plurality of channels—“information relating to the channels.” Exh-1005 at 6:15-16; *see also id.* at 6:17-18 (“Message lists are created for each channel.”). And Kakuta inherently discloses an interface for displaying and selecting from a plurality of channels in its combo box in Figures 4-10 and 12. However, Kakuta lacks specific details of some aspects of the use of multiple channel identifiers, and a PHOSITA would therefore have been motivated to look to Matsumoto, which provides these details. For instance, Matsumoto teaches setting conditions (e.g., keyword, user name, etc.) to selectively filter messages and transfer/forward them to a channel, and using this function messages of two or more channels will be displayed in one channel when messages from the two or more channels are sent to the same channel. Exh-1006 at 2:65-3:4 “When a message occurs on channel #CH1, a decision is made as to whether or not it includes ‘#CUSTOMER*.’ If it is included, the message that occurred is sent to channel #CH2. Therefore, of the various messages on channel #CH1, only messages that include the specified keyword ‘#CUSTOMER*’ are sent to channel #CH2.”; *see also* 3:51–55, 16:42-50, Claim 1. Kakuta inherently

discloses the ability to select a channel (using the channel drop-down box, *see* Section IX.A.4), and when this is done and the user selects the destination channel of Matsumoto’s filters, the user will see messages that originate from a multitude of different channels. A PHOSITA would have understood that integrating Matsumoto’s filter-destination channel into the functionality provided by Kakuta would be a simple and routine matter.

296. A PHOSITA would have had a reasonable expectation of success by combining Kakuta with Matsumoto because both references focus on the display and user interface of messages. It would be a matter of simply combining computer code, or instructions, to combine the invention of the two references. Moreover, I note that both references cite U.S. Patent No. 5,793,365 (“Tang”) as a relevant reference, further indicating that Kakuta and Matsumoto are among the same field.

297. A PHOSITA would also have been motivated to look to Chang for its specific teachings regarding the adding of parties to group chats. While Kakuta discloses that “[t]here are instances in which the joining/departing of channel participating users” may occur (Exh-1005 at 11:6-7), Kakuta lacks specific details of how these joining/departing activities are achieved. A PHOSITA would therefore have looked to Chang for its specific teaching on this, including through

its embodiments disclosed in Chang, Exh-1007 at Figures 31-33 and at [0276]-[0284].

298. A PHOSITA would have had a reasonable expectation of success by combining Kakuta with Chang because both references focus on the filtering of messages and user interface. It would be a matter of simply combining computer code, or instructions, to combine the invention of the two references.

299. A PHOSITA would have a reasonable expectation of success by combining all three references because the references could easily be combined simply by adding additional computer instructions. It is common in the field to combine instructions and references to improve a display or user interface, particularly when, as here, the changes are relatively minor, altering interfaces for the display and manipulation of channel identifiers, and adjusting interfaces for adding or removing users from a chat.

XV. EXHIBITS

A. Exhibit 1012, John E. Grayson, Python and Tkinter Programming, (2000)

300. Exhibit 1012 is a copy of the book Python and Tkinter Programming by John E. Grayson (2000) that I personally found and located at the publicly accessible website: https://electrovolt.ir/wp-content/uploads/2017/07/Python_And_Tkinter_Programming_ElectroVolt.ir_.pdf. Exhibit 1012 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 1013, Apple, Human Interface Guidelines: The Apple Desktop Interface (1987)

301. Exhibit 1013 is a copy of the publication of Apple, Human Interface Guidelines: The Apple Desktop Interface (1987) that I personally found and located at the publicly accessible website:

<https://andymatuschak.org/files/papers/Apple%20Human%20Interface%20Guidelines%201987.pdf>. Exhibit 1013 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.

C. Exhibit 1014, 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)

302. Exhibit 1014 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 1014 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.

D. Exhibit 1015, Andrew Cockburn and Saul Greenberg, “Making Contact: Getting the Group Communicating with Groupware.” In *Proceedings of the conference on Organizational computing systems (COCS ‘93)*, Association for Computing Machinery, New York, NY, USA, 31–41 (1993)

303. Exhibit 1015 is a copy of the publication of Andrew Cockburn and Saul Greenberg, “Making Contact: Getting the Group Communicating with Groupware.” In *Proceedings of the conference on Organizational computing systems (COCS ‘93)*, Association for Computing Machinery, New York, NY, USA, 31–41 (1993) that I personally found and located at the publicly accessible website: <https://doi.org/10.1145/168555.168559>. Exhibit 1015 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.

E. Exhibit 1016, Thomas F. Stafford & Dennis Gonier, *What Americans Like About Being Online*, 47 Communications of the ACM, 107, 107–12 (2004)

304. Exhibit 1016 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/10.1145/1029496.1029502>. Exhibit 1016 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.

XVI. CONCLUSION

305. For the foregoing reasons, I believe that Claims 1-30 are anticipated and/or rendered obvious by Kakuta, Kakuta in light of Matsumoto, Kakuta in light of Matsumoto in further view of Chang, or Kakuta in view of Chang.

Dated: September 26, 2024

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'Chen' followed by a stylized monogram, is written above a horizontal line.

APPENDIX A: Information Considered

<i>Exhibit No.</i>	<i>Description</i>
Exh-1001	U.S. Patent No. 11,973,731 to Cohen
Exh-1002	File History for Application No. 18/535,572
Exh-1005	U.S. Patent No. 6,630,944 (“Kakuta”)
Exh-1006	U.S. Patent No. 7,426,540 (“Matsumoto”)
Exh-1007	U.S. Patent Application Publication No. 2013/0069969 (“Chang”)
Exh-1012	John E. Grayson, Python and Tkinter Programming, (2000)
Exh-1013	Apple, Human Interface Guidelines: The Apple Desktop Interface (1987)
Exh-1014	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)
Exh-1015	Andrew Cockburn and Saul Greenberg, “Making Contact: Getting the Group Communicating with Groupware.” In <i>Proceedings of the conference on Organizational computing systems (COCS ‘93)</i> , Association for Computing Machinery, New York, NY, USA, 31–41 (1993)
Exh-1016	Thomas F. Stafford and Dennis Gonier, <i>What Americans Like About Being Online</i> , 47 Communications of the ACM, 107, 107–12 (2004)