

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

v.

WRINKL, INC.,
Patent Owner.

IPR2024-01490
Patent 11,973,731 B2

Before NEIL T. POWELL, BARBARA A. PARVIS, and
NABEEL U. KHAN, *Administrative Patent Judges*.

PARVIS, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

Slack Technologies, LLC and Salesforce, Inc. (“Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting an *inter partes* review of claims 1–30 of U.S. Patent No. 11,973,731 B2 (Ex. 1001, “the ’731 patent”). Wrinkl, Inc. (“Patent Owner”) did not file a Preliminary Response.

We have authority to determine whether to institute an *inter partes* review. *See* 35 U.S.C. § 314 (2018); 37 C.F.R. § 42.4(a) (2023). We may not authorize an *inter partes* review unless the information presented in the petition and any preliminary response “shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). For the reasons that follow, we institute an *inter partes* review as to claims 1–30 of the ’731 patent on all grounds of unpatentability presented.

I. BACKGROUND

A. Real Parties in Interest

Petitioner identifies Slack Technologies, LLC and Salesforce, Inc. as the real parties in interest. Pet. 1. Patent Owner identifies Wrinkl, Inc. as the real party in interest. Paper 4, 1.

B. Related Matters

Both parties identify, as a matter currently involving the ’731 patent, *Wrinkl, Inc. v. Slack Technologies, LLC*, No. 1:24-cv-00620 (D. Del. May 23, 2024). Pet. 1; Paper 4, 1. Patent Owner also states that an “IPR was filed against the same patent in proceeding number IPR2024-01489.” Paper 4, 1. Patent Owner does not argue that we should exercise discretion under 35 U.S.C. § 314(a) because Petitioner uses more than one petition to challenge the ’731 patent.

Petitioner ranks the petition in IPR2024-01489 first and argues that it “focuses on challenging the Patent Owner’s priority date.” Ex. 1017, 3–4. Petitioner ranks the instant petition second and argues the “petitions are materially different” with the instant petition addressing the challenged claims “using different prior art references that predate the alleged priority date.” *Id.* In accordance with the Consolidated Trial Practice Guide¹ (“CTPG”), issued in November 2019, “there may be circumstances in which more than one petition may be necessary” including “when there is a dispute about priority date requiring arguments under multiple prior art references.” CTPG 59. Such is the case here. Patent Owner does not file any Preliminary Response or other paper disputing Petitioner’s use of two petitions to challenge the claims of the ’731 patent. Based on the record before us, we consider the merits of both petitions because we are satisfied with Petitioner’s stated reasons for filing two petitions. *See generally* Ex. 1017.

C. The ’731 Patent

The ’731 patent is titled “System and Methods for Subsidiary Channel-Based Thread Communications.” Ex. 1001, code (54). The ’731 patent relates to “real-time electronic communications, and more specifically, to creating and displaying subsidiary channel-based thread communications in a group-based messaging system.” *Id.* at 2:40–43.

Operation of the channel-based thread communications is described with respect to system 100 shown in Figure 1 below. *Id.* at 5:13–14.

¹ Available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>.

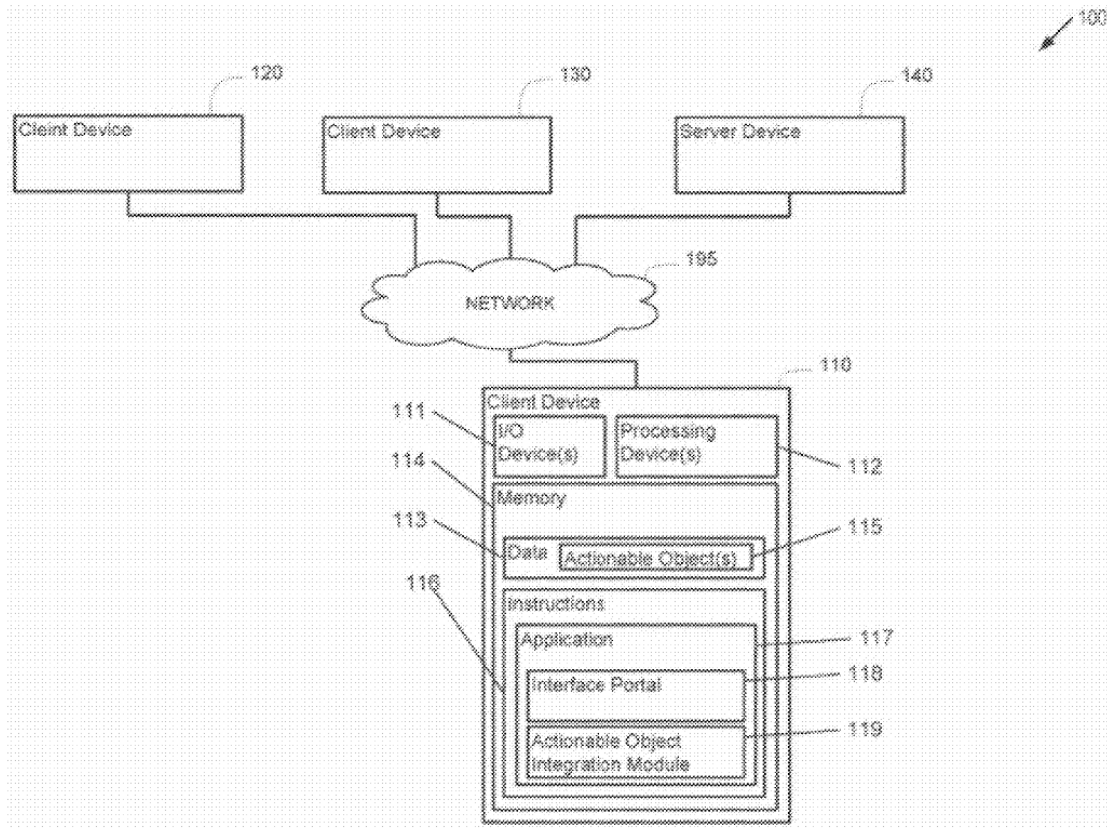


FIG. 1

Figure 1, above, illustrates a block diagram of system 100 having server device 140 that is coupled to client devices 110, 120, and 130 via network 195. *Id.* at 3:5–6, 5:19–29. Server device 140 communicates with client computing devices 110, 120, and 130 to facilitate communications between two or more client devices. *Id.* at 5:19–23.

As shown in Figure 1, each of computing devices, such as client device 110, includes one or more input/output (I/O) devices 111, processors 112, memory 114, and other components typically present in a general-purpose computer. *Id.* at 5:46–50. Instructions 116 of client device 110 are executed by processor 112. *Id.* at 6:9–11. Instructions 116 include application 117 that provides interactive interface portal 118 for facilitating channel-based thread communications. *Id.* at 6:46–51, Fig. 1.

Interface portal 118 displays network content, such as chat messages of a chat session and allows a participant to interactively navigate over the display of data. *Id.* at 7:5–11. Data 118 is retrieved, stored, and modified by processor 112 in accordance with instructions 116. *Id.* at 6:18–19. Data 118 includes actionable objects 115 that identify user perceivable action that is included in a chat session. *Id.* at 6:31–33.

Operation of the channel-based thread communications is shown with respect to a screenshot shown in Figure 10F below. *Id.* at 24:16–18.

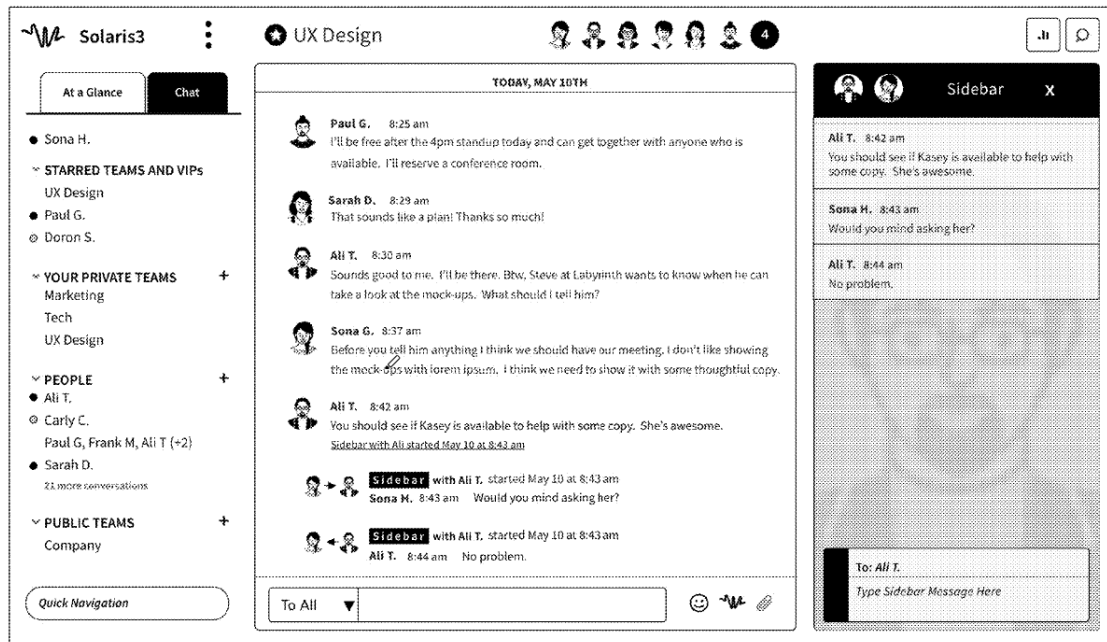


FIG. 10F

Figure 10F illustrates a screenshot showing a plurality of messages exchanged between participants. *Id.* at 24:19–20.

As shown in Figure 10F, the messages exchanged between participants are displayed in a portion of the screen that is referred to as “the main conversation pane.” *Id.* at 24:19–22. Figure 10F also illustrates an exemplary “private 1:1 conversation” between two participants “Sona and

Ali” that excludes at least one person who is participating in the messaging that is displayed on the main conversation pane. *Id.* at 24:29–34. Ali’s message is designated as an “anchor message” and is displayed in a separate pane referred to as a “sidebar.” *Id.* at 24:35–42. As shown in Figure 10F, a responsive message sent by Sona and a response to that message sent by Ali appear in the sidebar. *Id.* at 24:42–52, Fig. 10F.

D. Illustrative Claims

Petitioner challenges claims 1–30 of the ’731 patent. Pet. 1. Of the challenged claims, claims 1, 15, 25, and 30 are independent. Claims 2–14 depend, directly or indirectly, from claim 1; claims 16–24 depend, directly or indirectly, from claim 15; and claims 26–29 depend, directly or indirectly, from claim 25. Claim 1 is illustrative of the challenged claims and recites:

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:

[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:

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

[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

[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,

- [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,
- [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;
- [1[g]] display said first messaging communication with said second pane;
- [1[h]] display a first user-selectable control associated with said first messaging communication;
- [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;
- [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 [1[k]] wherein said first messaging communication is displayed within said third pane and said second pane simultaneously;
- [1[l]] receive user input of an additional messaging communication in said sidebar text-entry field;
- [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
- [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;

[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:

[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.

Ex. 1001, 27:24–28:32.²

E. Priority Date of the Challenged Claims

In the petition in IPR2024-01489, Petitioner challenges “Patent Owner’s priority date.” Ex. 1017, 3–4. Petitioner argues that the asserted prior art in the instant Petition predates Patent Owner’s “alleged priority date.” *Id.* At this preliminary stage, Petitioner’s argument that the asserted art in the instant Petition predates the earliest alleged filing date of the ’731 patent is supported by the evidence of record.

The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284 (2011), amended 35 U.S.C. § 102 and § 103, effective March 16, 2013. Even using the earliest effective filing date asserted by Patent Owner, the challenged claims of the ’731 patent have an apparent effective filing date after March 16, 2013. Ex. 1001, codes (60), (65). Thus, the AIA versions of § 102 and § 103 apply. Our determinations and findings herein would not change if the pre-AIA provisions applied.

² Herein, we use Petitioner’s designations for the elements of the challenged claims. *See generally* Ex. 1018.

F. Evidence

Petitioner relies on the following patent evidence.

Name	Patent Document	Exhibit
Kakuta	U.S. Patent No. 6,630,944 B1	1005
Matsumoto	U.S. Patent No. 7,426,540 B1	1006
Chang	U.S. Published Application No. 2013/0069969 A1	1007

Petitioner also relies on the testimony of Dr. Andrew Cockburn.

Ex. 1003.

G. Asserted Grounds

Petitioner asserts that the challenged claims would have been unpatentable on the following grounds (Pet. 5–6):

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1–7, 9–12, 15–19, 21, 22, 25–27, 30	102	Kakuta
1–7, 9–19, 21–30	103	Kakuta
1–7, 9–19, 21–29	103	Kakuta, Matsumoto
1–29	103	Kakuta, Chang, Matsumoto
30	103	Kakuta, Chang

II. ANALYSIS

A. Legal Standards

To show anticipation under 35 U.S.C. § 102, each and every claim element, arranged as in the claim, must be found in a single prior art reference. *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359 (Fed. Cir. 2008); *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987). Identity of terminology is not required for a claim element to be met directly by the prior art. *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009); *In re Bond*, 910 F.2d 831, 832 (Fed. Cir. 1990) (citations omitted) (“[T]his is not an ‘ipsissimis verbis’ test.”). For anticipation, we

take into account not only the specific teachings of the reference, but also the inferences which one skilled in the art would reasonably be expected to draw therefrom. *In re Preda*, 401 F.2d 825, 826 (CCPA 1968).

A claim is unpatentable as obvious if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. 35 U.S.C. § 103 (2011). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) when in evidence, objective evidence of nonobviousness, i.e., secondary considerations.³ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

B. Level of Ordinary Skill in the Art

Petitioner asserts that a person of ordinary skill in the art would have had “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” or, alternatively “a master’s degree in computer science (or similar discipline) and at least two years of similar experience.” Pet. 6–7 (citing Ex. 1003 ¶ 39). We find that “at least” in Petitioner’s formulation of the level of skill in the art is vague and open-ended. Otherwise, we preliminarily adopt Petitioner’s

³ No objective evidence of nonobviousness has been presented at this preliminary stage in the proceeding.

formulation of the level of skill in the art, which appears consistent with the specification and prior art presented.

C. Claim Construction

We interpret the challenged claims

using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.

37 C.F.R. § 42.100(b). Under that standard, we generally give claim terms their ordinary and customary meaning, as would be understood by a person of ordinary skill in the art at the time of the invention, in light of the language of the claims, the specification, and the prosecution history.

Phillips v. AWH Corp., 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc).

Petitioner states that it gives the claim terms “their plain and ordinary meaning that they would have to a person having ordinary skill in the art [(‘PHOSITA’)] in view of the intrinsic evidence.” Pet. 6. At this early stage, neither party provides an express construction for any claim term. “The Board is required to construe ‘only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.’” *Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)). We, therefore, use the ordinary and customary meaning and do not provide an express construction for any term at this preliminary stage in the proceeding.

D. Overview of Asserted Prior Art

1. Kakuta

Kakuta is titled “Display Control Method and Device.” Ex. 1005, code (54). Kakuta relates to technology that makes display easy to view in a textual conversation system, such as Internet Relay Chat (IRC). *Id.* at 1:9–12. A configuration of display control device 2 is shown in Figure 1. *Id.* at 5:38–47.

Fig. 1

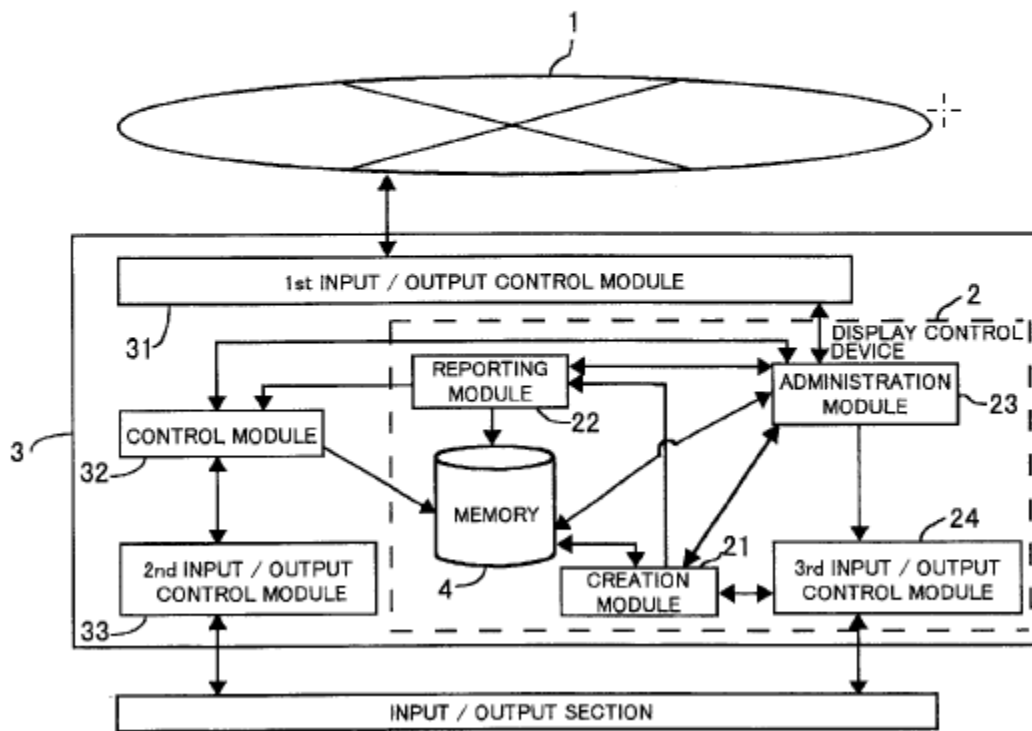


Figure 1, above, illustrates a function block diagram of a configuration including chat client 3 having display control device 2, first input/output control module 31, control module 32, second input/output control module 33, and memory 4. *Id.* at 5:45–51. As can be seen in Figure 1,

display control device 2 has creation module 21, reporting module 22, third input/output control module 24, administration module 23, and memory 4.

Id. at 6:8–14, Fig. 1.

Administration module 23 receives from third input/output module 24 selection of processes on threads, and directs the processes to creation module 21. *Id.* at 7:39–41. In accordance with instructions from administration module 23 and creation module 21, third input/output module 24 displays toolbar 305 and various windows, accepts process selections in toolbar 305 and message input through the thread window, and accepts and reports to creation module 21 users, message selections and thread selections. *Id.* at 7:48–57.

Figure 7 illustrates main screen 301 displayed by display control device 2. *Id.* at 7:61–67.

Fig. 7

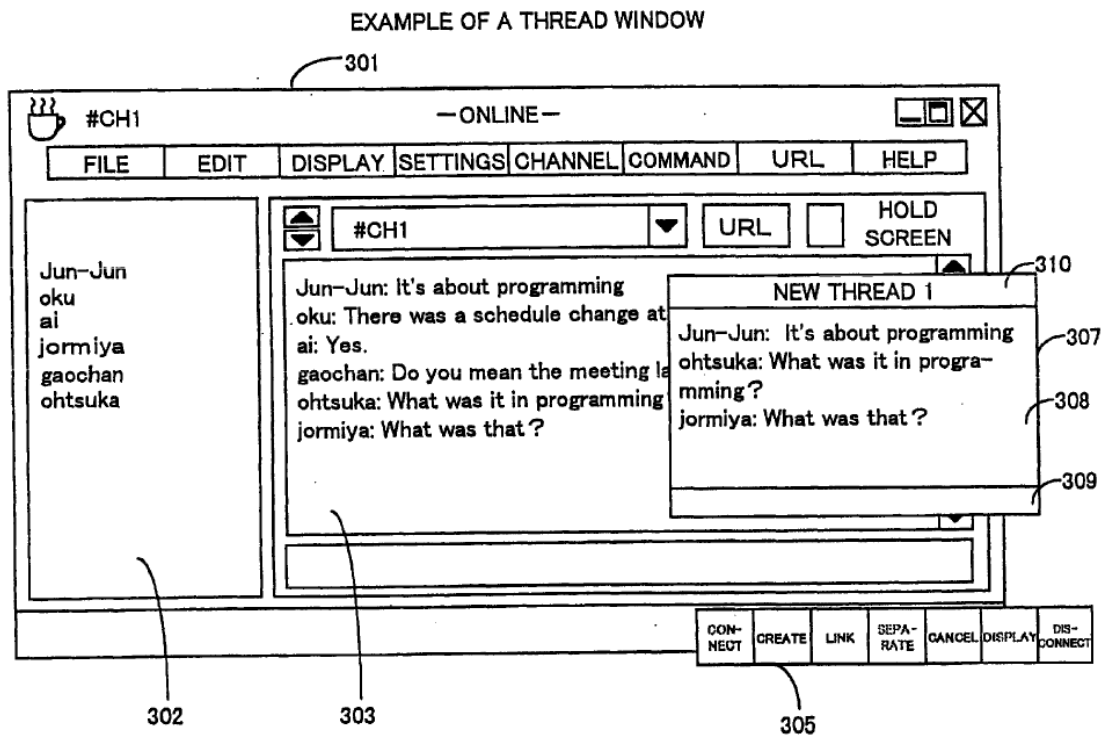


Figure 7, above, illustrates main screen 301 having user window 302, chat window 303, and thread window 307, which are displayed by display control device 2. *Id.* at 7:65–8:3, Fig. 7. Kakuta describes that user window 302 and chat window 303 are generally displayed by IRC clients. *Id.* at 8:1–3.

As shown in Figure 7, thread window 307 includes message window 308, input field 309, and title field 310. *Id.* at 8:30–33. User messages composing the thread are displayed in message window 308. *Id.* at 8:33–34. Messages to the thread are input in input field 310. *Id.* at 8:34–35. The default thread name “New Thread 1” is displayed in title field 310. *Id.* at 8:35–37.

2. Matsumoto

Matsumoto is titled “Chat Sending Method and Chat System.”

Ex. 1006, code (54). Matsumoto relates to a chat sending system in which users share the same network and chat, and for content display of chat on the network. *Id.* at 2:44–47. Figure 3 illustrates a chat screen.

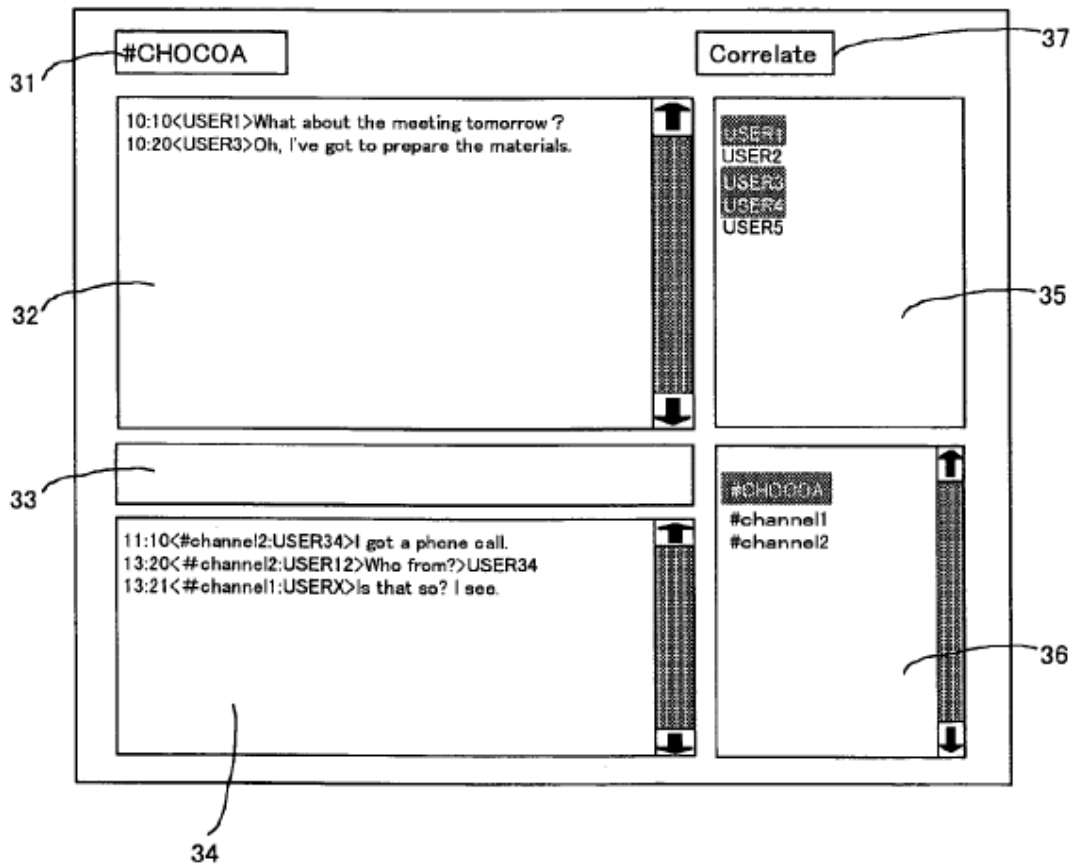


FIG. 3

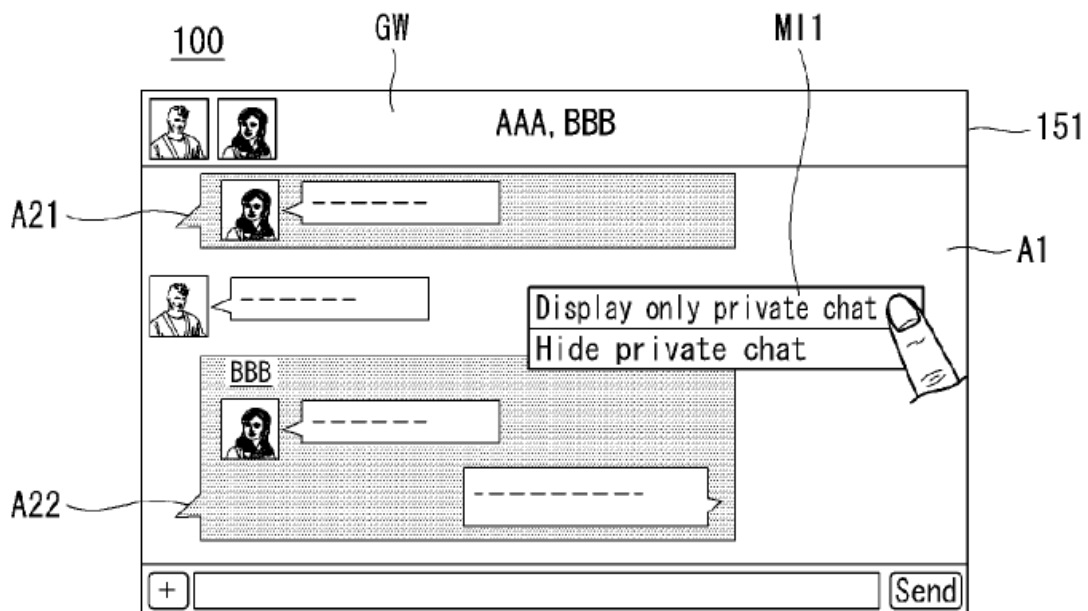
Figure 3, above, illustrates display of main channel window 31, main chat window 32, input window 33, sub-chat window 34, user window 35, and channel window 36. *Id.* at 9:31–35.

Main channel window 31 in Figure 3 above displays the channel where users are making messages. *Id.* at 9:35–37. Main chat window 32 displays message on the main channel. *Id.* at 9:37–38. Input window 33 receives input for messages to the main channel. *Id.* at 9:38–39. Sub-chat window 34 displays messages from channels other than the main channel that IRC client 2 participates in. *Id.* at 9:40–42. User window 35 displays the nicknames of users participating in the main channel. *Id.* at 9:43–44. Channel window 36 displays the names of channels that IRC client 2 participated in. *Id.* at 9:43–46.

3. Chang

Chang is titled “Mobile Terminal and Method for Displaying Message Thereon.” Ex. 1007, code (54). Chang relates to displaying a chat message on a mobile terminal. *Id.* ¶¶ 3, 6. An exemplary display of a chat message is shown in Figure 29. *Id.* ¶ 32.

FIG. 29



(a)

Figure 29, above, illustrates private chat areas A21 and A22 in a group chat window on a mobile terminal. *Id.* ¶¶ 32, 270. Figure 29 also includes item M11, which is selectable such that controller 180 of mobile terminal 100 displays or hides the private chat. *Id.* ¶¶ 45, 270–271, Fig. 29.

E. Unpatentability of Claims 1–30

1. Unpatentability of Claim 1

Petitioner provides alternative arguments for the unpatentability of claim 1 including that claim 1 is unpatentable as (1) anticipated by Kakuta; (2) obvious over Kakuta; (3) obvious over Kakuta and Matsumoto; and (4) obvious over Kakuta, Matsumoto, and Chang. *See, e.g.*, Pet. 5–6. At this preliminary stage, Patent Owner has not filed a Preliminary Response. Based on the preliminary record before us, we find that Petitioner’s element-by-element analysis for claim 1 is sufficient for purposes of institution on all grounds argued in the Petition. We summarize certain of Petitioner’s persuasive arguments and evidence below.

a. The Preamble and Element 1[a]

The preamble and element 1[a] are reproduced below.

[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:
[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.

Ex. 1001, 27:24–30.

Regarding anticipation by Kakuta, Petitioner relies on Kakuta’s display control device for disclosing the preamble and element 1[a]. Pet. 11–13 (citing Ex. 1005, 2:30–35, 5:45–51, 6:9–13, 7:39–59, Figs. 1, 14;

Ex. 1003 ¶¶ 48–54).⁴ Petitioner argues that “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.*

Petitioner also argues that element 1[a] would have been obvious over Kakuta alone. *Id.* at 82–83 (citing Ex. 1005, 4:17–37; Ex. 1003 ¶¶ 202–204). Petitioner argues that Kakuta discloses performing “tasks such as managing threads and controlling the display of information,” which “inherently require the execution of processes.” *Id.* Petitioner also argues that “a processor is necessary to execute the display control program and management communication between and system components” disclosed in Kakuta. *Id.* Petitioner further argues that using a processor would have been “a routine and well-known design choice.” *Id.*

We find that Petitioner’s arguments and evidence for the preamble and claim element 1[a] are sufficient for purposes of institution.

b. Elements 1[b]–1[d]

Elements 1[b]–1[d] are reproduced below.

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

[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

⁴ We need not resolve whether the preamble is limiting at this stage because Petitioner shows sufficiently for purposes of institution that the prior art satisfies the recitation in the preamble.

[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.

Ex. 1001, 27:31–43.

For element 1[b], Petitioner relies on Kakuta’s description of display control device 2 displaying main screen 301 having user window 302 and chat window 303, among other things. Pet. 13–14 (citing Ex. 1005, 2:30–42, 3:27–29, 7:60–64, Fig. 5; Ex. 1003 ¶ 55). For elements 1[c] and 1[d], Petitioner relies on Kakuta’s channel identifier display pane and chat window 303. *Id.* at 13–18 (citing Ex. 1005, 1:13–19, 1:57–58, 2:4–9, 2:36–41, 6:28–33, Figs. 2, 5, 8; Ex. 1012, 52, 53, 549–51; Ex. 1003 ¶¶ 57–63). For “plurality of channel identifiers” recited in elements 1[c] and 1[d], Petitioner makes three alternative arguments including (1) that Kakuta discloses the “plurality of channel identifiers” recitation; (2) that the recitation of “plurality of channel identifiers” would have been obvious over Kakuta alone and in view of the knowledge of a person of ordinary skill in the art; and (3) the recitation of “plurality of channel identifiers” would have been obvious over the combination of Kakuta and Matsumoto. Pet. 13–18, 83–85, 99–101.

We start with Petitioner’s first argument that Kakuta discloses the “plurality of channel identifiers” recitation. Pet. 13–18. Petitioner relies on Kakuta’s illustration of its channel identifier display pane having “a drop-down menu.” *Id.* at 16 (citing Ex. 1005, Fig. 8; Ex. 1003 ¶ 59). Petitioner argues the drop-down menu indicates “that there is more than one channel identifier that can be chosen” and argues that a person of ordinary skill in the art would have understood “that the drop-down would necessarily

list different channels.” *Id.* at 16–17 (citing Ex. 1003 ¶ 59; Ex. 1012, 52, 53, 549–51). Petitioner also relies on (1) Kakuta’s disclosure that “in IRC creating channels that differ according to topic is easy;” and (2) Kakuta’s disclosure that its display control device correlates messages on the network based on user instructions and creates message groups. *Id.* (citing Ex. 1005, 1:57–58, 2:4–9, 2:36–41, 15:44–61; Ex. 1003 ¶¶ 59–60). Petitioner argues the message groups correspond to groups of users or channels. *Id.*

We turn to Petitioner’s second argument that the recitation of “plurality of channel identifiers” would have been obvious over Kakuta alone and in view of the knowledge of a person of ordinary skill in the art. *Id.* at 83–85 (citing Ex. 1005, 3:32–38, Fig. 8; Ex. 1012, 52, 53, 549–51; Ex. 1003 ¶¶ 206–211). Petitioner argues that Kakuta’s disclosure of message groups teaches the recitation of “plurality of channel identifiers.” In particular, Petitioner relies on Kakuta’s disclosure 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” and argues that this disclosure “teaches that each channel identifier corresponds to an associated group of members who are users of said system.” *Id.* at 84–85 (quoting Ex. 1005, 3:32–38; Ex. 1003 ¶ 208). Petitioner also relies on the understanding of a person of ordinary skill in the art of drop-down options. *Id.* at 83–85 (citing, e.g., Ex. 1005, Fig. 8; Ex. 1012, 52, 53, 549–51; Ex. 1003 ¶¶ 206–211).

We turn to Petitioner’s third argument that the recitation of “plurality of channel identifiers” would have been obvious over the combination of Kakuta and Matsumoto. Pet. 99–101 (citing Ex. 1006, 7:46–48, 9:31–34,

9:44–46, Fig. 3; Ex. 1003 ¶¶ 245–248). Petitioner relies on (*id.*) Matsumoto’s disclosure that “channel window 36 displays the names of channels in which the IRC client 2 is participating.” Ex. 1006, 9:44–46. Petitioner also relies on (Pet. 100) the illustration of multiple channels in channel window 36 shown in Figure 3 of Matsumoto. *Id.* at Fig. 3. Petitioner argues a person of ordinary skill in the art would have combined the teachings of Kakuta and Matsumoto in the manner recited in elements 1[c] and 1[d] because the proposed combination would have provided “an intuitive and efficient way for users to view and select among various channels.” Pet. 100–101; Ex. 1003 ¶ 248. Based on the preliminary record before us at this early juncture, we find that Petitioner provides sufficient articulated reasoning with rational underpinning to support Petitioner’s proposed combination. Pet. 100–101; Ex. 1003 ¶ 248.

We find that Petitioner’s arguments and evidence for elements 1[b]–1[d] are sufficient for purposes of institution.

c. Elements 1[e]–1[g]

Elements 1[e]–1[g] are reproduced below.

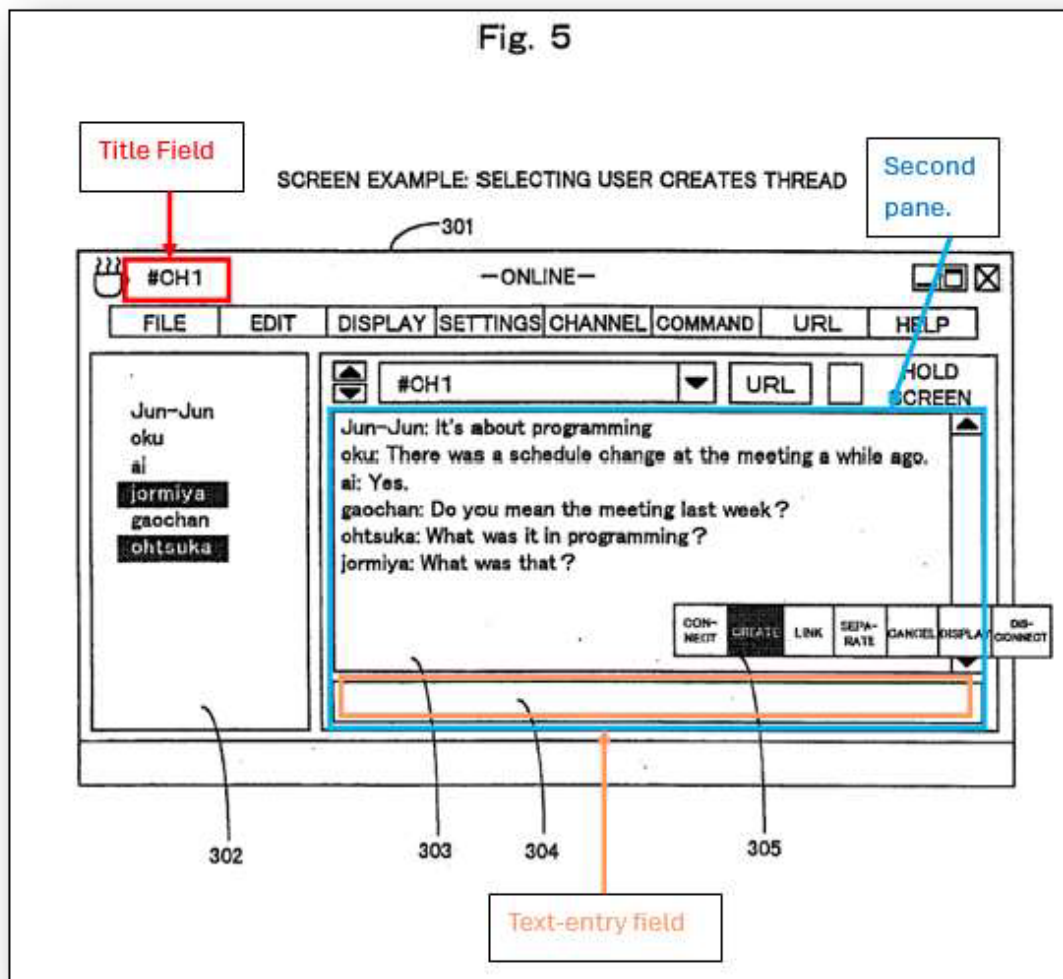
[1[e]] wherein, associated with said second pane, is a channel text entry field that is user operable to generate communication in said selected one of said plurality of group-based communication channels, and a title field displaying information identifying said selected one of said plurality of group-based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

[1[g]] display said first messaging communication with said second pane.

Ex. 1001, 27:44–59.

In its arguments for elements 1[e]–1[g], Petitioner provides annotations illustrating the “first pane” recited in element 1[c] and the “second pane,” which is recited in elements 1[d], 1[e], and 1[g]. *See, e.g.*, Pet. 20, 24, 25 (providing annotations of Ex. 1005, Figs. 5, 8). For the “first pane” and “second pane,” Petitioner continues to rely on Kakuta’s channel identifier display pane and chat window 303, respectively. *Id.* at 20, 24, 25 (citing Ex. 1005, Figs. 5, 8).

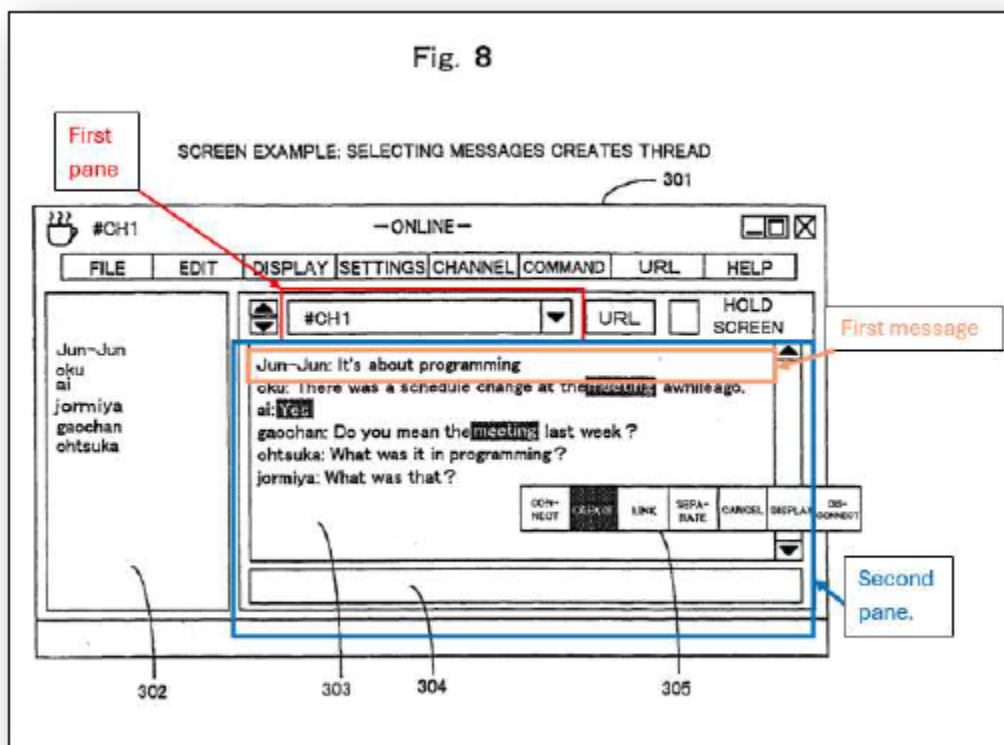
For element 1[e], Petitioner provides an annotated version of Figure 5 of Kakuta identifying disclosure corresponding to the “text entry field” and “title field.” Pet. 20.



Annotated Figure 5 of Kakuta, above, illustrates main screen 301 having user window 302, chat window 303, message input field 304, and toolbar 305, which are displayed by display control device 2. Ex. 1005, 7:65–8:1, 8:12–14, Fig. 5. As shown above, Figure 5 includes Petitioner’s annotations as follows: (1) a red textual annotation of “Title Field,” a red drawing of a box around “#CH1” in the upper left-hand corner of main screen 301, and a red unidirectional arrow from the red textual annotation to the red drawn box; (2) a blue textual annotation of “Second pane,” blue outlining of chat window 303,” and a blue unidirectional arrow from the blue textual annotation to the blue outlining of chat window 303; and (3) a

brown textual annotation of “Text entry field,” brown outlining of the box depicting message input field 304, and a brown unidirectional arrow from the brown textual annotation to the brown outlining of the box depicting message input field 304. Pet. 20.

For elements 1[f] and 1[g], Petitioner provides an annotated version of Figure 8 of Kakuta identifying disclosure corresponding to the “first messaging communication.” Pet. 20, 25.



Annotated Figure 8 of Kakuta, above, illustrates main screen 301 having user window 302, chat window 303, message input field 304, and toolbar 305, which are displayed by display control device 2. Ex. 1005, 7:65–8:1, 8:12–14, Fig. 8. As shown above, Figure 8 includes Petitioner’s annotations as follows: (1) a red textual annotation of “First pane,” red outlining of the box depicting the drop-down box with “#CH1,” and a red

unidirectional arrow from the red textual annotation to the red outlining of the drop-down box; (2) a blue textual annotation of “Second pane,” blue outlining of chat window 303, and a blue unidirectional arrow from the blue textual annotation to the blue outlining of chat window 303; and (3) a brown textual annotation of “First message,” a brown drawing of a box outlining “Jun-Jun: It’s about programming,” and a brown unidirectional arrow from the brown textual annotation to the brown outlining of the box depicting message input field 304. Pet. 25. Petitioner also relies on Kakuta’s disclosure of a “MESSAGE LIST” illustrating “CHANNEL” identified as “CH-1” with a first “MESSAGE ID” that corresponds to a message “about programming. . . .” *Id.* at 23 (providing annotations of Ex. 1005, Fig. 2).

We find that Petitioner’s arguments and evidence for claim elements 1[e]–1[g] are sufficient for purposes of institution.

d. Element 1[h]

Element 1[h] recites “display a first user-selectable control associated with said first messaging communication.” Ex. 1001, 27:60–61. Petitioner relies on Kakuta’s “toolbar 305,” which Petitioner argues comprises “various tools (i.e., ‘user-selectable controls’), such as ‘Create,’ ‘Display,’ ‘Link,’ ‘Separate,’ ‘Connect,’ ‘Cancel,’ and ‘Disconnect.’” Pet. 25 (quoting Ex. 1005, Fig. 4, 8:30–58). Petitioner also relies on Kakuta’s disclosure that “Create” is associated with messaging communications. *Id.* at 25–27 (citing Ex. 1005, 8:53–58, Figs. 8, 9; Ex. 1003 ¶¶ 78–80).

We find that Petitioner’s arguments and evidence for claim element 1[h] is sufficient for purposes of institution.

e. Elements 1[i] and 1[j]

Elements 1[i] and 1[j] are reproduced below.

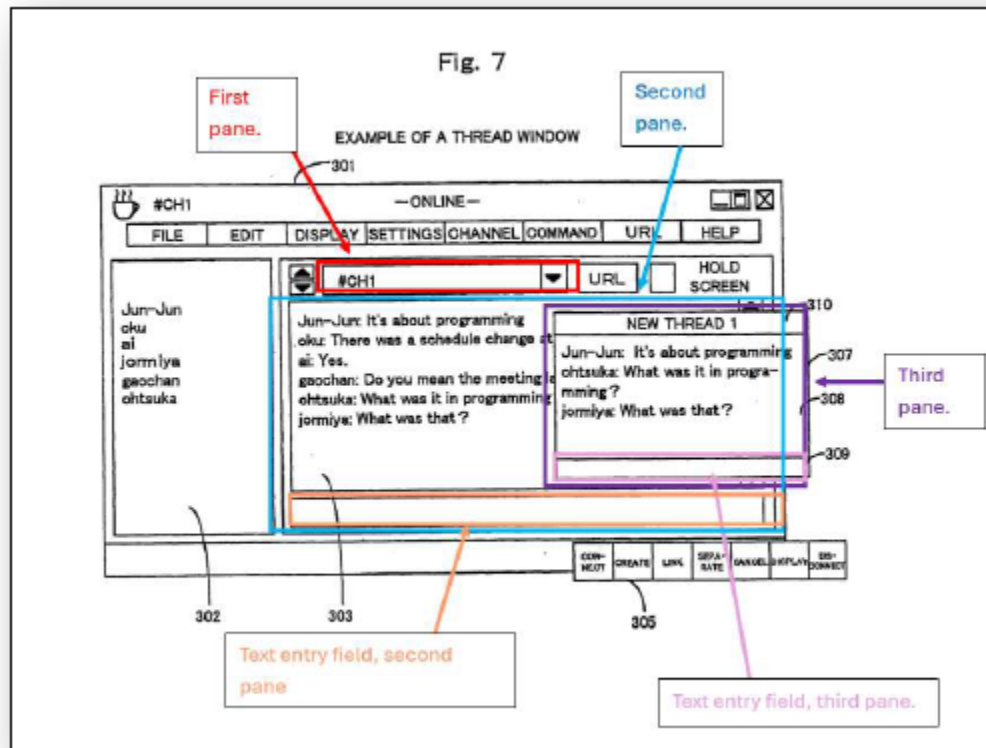
- [1[i]] in response to a user selection of said first user-selectable control, display a third pane, said third pane displaying said first messaging communication and having an associated sidebar text-entry field that is different from said channel text-entry field and operable to receive user input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

Ex. 1001, 27:62–28:3.

For elements 1[i] and 1[j], Petitioner provides annotated versions of Figures 7 and 8 of Kakuta to show Petitioner’s asserted correspondence between features illustrated in these Figures and claim recitations.

Pet. 27–32 (providing annotations of Figs. 7, 8). For instance, Petitioner again identifies “Jun-Jun: It’s about programming” as corresponding to the “first messaging communication” recited in elements 1[f], 1[g], and 1[i]. *Id.* at 31 (providing annotations of Ex. 1005, Fig. 7).

Another of Petitioner’s annotated versions of Figure 7 of Kakuta is reproduced below. Pet. 32.



Petitioner's Annotated Figure 7 of Kakuta illustrates main screen 301 having user window 302, chat window 303, toolbar 305, and thread window 307, which are displayed by display control device 2. Ex. 1005, 7:65–8:1, 8:12–14, 8:30–37, Fig. 7. As shown above, Figure 7 includes Petitioner's annotations as follows: (1) a red textual annotation of "First pane," red outlining of the box depicting the drop-down box with "#CH1," and a red unidirectional arrow from the red textual annotation to the red outlining of the drop-down box; (2) a blue textual annotation of "Second pane," blue outlining of chat window 303, and a blue unidirectional arrow from the blue textual annotation to the blue outlining of chat window 303; (3) a purple textual annotation of "Third pane," purple outlining thread window 307, and a purple unidirectional arrow from the purple textual annotation to the purple outlining of thread window 307; (4) a light purple textual annotation of

“Text entry field, third pane” light purple outlining of input field 309, and a light purple unidirectional arrow from the light purple textual annotation to the light purple outlining; (5) a brown textual annotation of “Text entry field, second pane,” a brown outlining of an input field depicted at the bottom of chat window 303, and a brown unidirectional arrow from the brown textual annotation to the brown outlining. Pet. 32.

We find that Petitioner’s arguments and evidence for claim elements 1[i] and 1[j] are sufficient for purposes of institution.

f. Elements 1[k]–1[n]

Elements 1[k]–1[n] are reproduced below.

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

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

[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

[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.

Ex. 1001, 28:4–28:21.

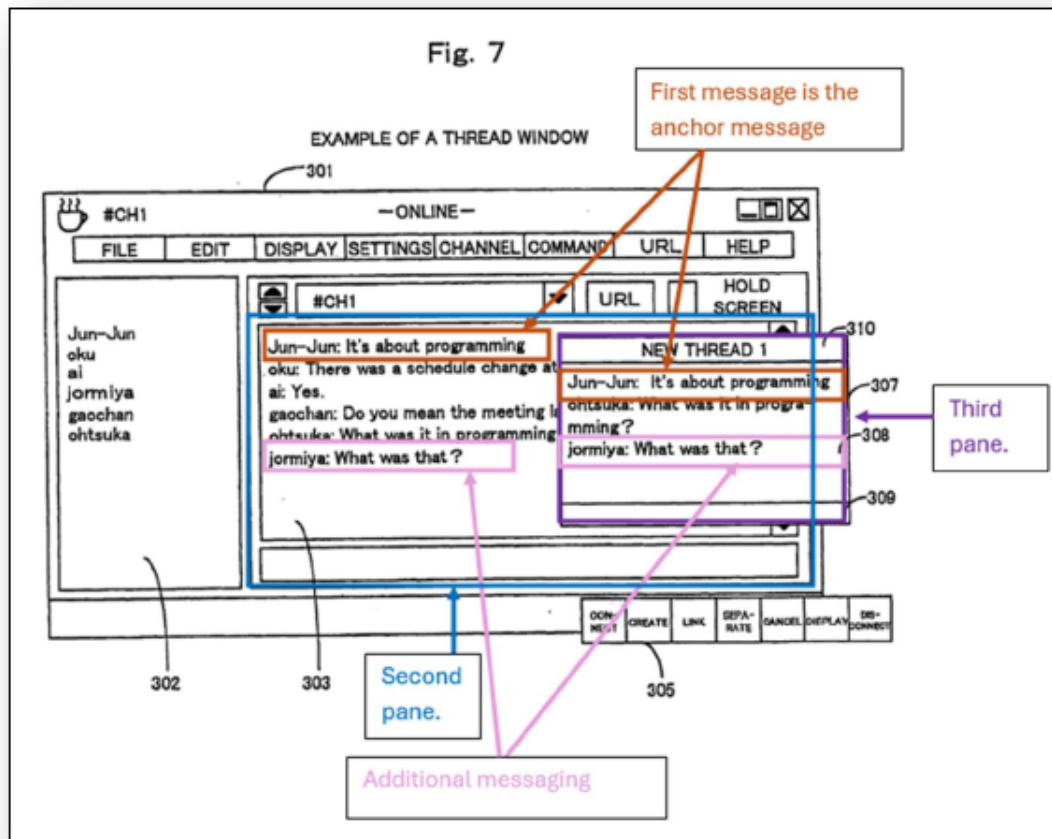
For element 1[k], Petitioner again identifies “Jun-Jun: It’s about programming” as corresponding to the “first messaging communication” recited in elements 1[f], 1[g], 1[i], and 1[k]. Pet. 33 (providing annotations of Ex. 1005, Fig. 7). Petitioner outlines “Jun-Jun: It’s about programming” in both chat window 303 and thread window 307 in support of its argument

that Kakuta discloses that the “first messaging communication is displayed within said third pane and said second pane simultaneously.” *Id.*

For element 1[l], Petitioner again relies on input field 309 in thread window 307 for disclosing “sidebar text-entry field” recited in elements 1[i], 1[j], and 1[l]. Pet. 34 (providing annotations to Ex. 1005, Fig. 7). Petitioner also relies on Kakuta’s disclosure of a user inputting messages for the thread in input field 309. *Id.* at 33–34 (citing Ex. 1005, 8:33–35, 9:42–44, Fig. 13 (step 1); Ex. 1003 ¶ 93).

For element 1[m], Petitioner argues “Kakuta describes a system where user input, such as message 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.” Pet. 35 (citing Ex. 1005, 8:30–37, 9:44–53, 10:3–5, Fig. 7, Fig. 13 (steps 2–3), Fig. 14 (step 11); Ex. 1003 ¶¶ 96–98).

For element 1[n], Petitioner argues that the “first messaging communication” corresponds to the “anchor message” recited in element 1[n]. Pet. 36–38 (citing Ex. 1005, code (57), 8:30–37, 10:20–30, 10:38–42, Figs. 2, 7, 14; Ex. 1003 ¶¶ 100–102). Petitioner provides an annotated version of Figure 7 showing simultaneous display of the “first messaging communication” and the “additional messaging communication.” *Id.* at 37.



Petitioner's Annotated Figure 7 of Kakuta illustrates main screen 301 having user window 302, chat window 303, toolbar 305, and thread window 307, which are displayed by display control device 2. Ex. 1005, 7:65–8:1, 8:12–14, 8:30–37, Fig. 7. As shown above, Figure 7 includes Petitioner's annotations as follows: (1) a blue textual annotation of "Second pane," blue outlining of chat window 303, and a blue unidirectional arrow from the blue textual annotation to the blue outlining of chat window 303; (2) a purple textual annotation to the blue outlining of chat window 303; (2) a purple textual annotation of "Third pane," purple outlining thread window 307, and a purple unidirectional arrow from the purple textual annotation to the purple outlining of thread window 307; (3) a light purple textual annotation of "Additional messaging," a first light purple drawing of a box around "jormiya: What was that?" shown in chat window 303, a second light purple

drawing of a box around “jormiya: What was that?” shown in thread window 307, and two light purple unidirectional arrows from the light purple textual annotation to the two light purple boxes; (5) a brown textual annotation of “First message is the anchor message,” a first brown drawing of a box around ““Jun-Jun: It’s about programming” shown in chat window 303, a second brown drawing of a box around “Jun-Jun: It’s about programming” shown in thread window 307, and two brown unidirectional arrows from the brown textual annotation to the two brown boxes. Pet. 37.

We find that Petitioner’s arguments and evidence for claim elements 1[k]–1[n] are sufficient for purposes of institution.

g. Elements 1[o] and 1[p]

Elements 1[o] and 1[p] are reproduced below.

[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:

[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.

Ex. 1001, 28:22–28:32.

For element 1[o], Petitioner makes three alternative arguments including (1) that Kakuta discloses the recitation of “said second user-selectable control being associated with an indication that said first messaging communication is an anchor message of a subsidiary communication thread;” (2) that the recitation of “said second user-selectable control being associated with an indication that said first

messaging communication is an anchor message of a subsidiary communication thread” would have been obvious over Kakuta alone and in view of the knowledge of a person of ordinary skill in the art; and (3) the recitation of “plurality of channel identifiers” would have been obvious over the combination of Kakuta, Matsumoto, and Chang. Pet. 39–42, 85–86, 106–108.

For the first alternative that Kakuta discloses the recitation of “said second user-selectable control being associated with an indication that said first messaging communication is an anchor message of a subsidiary communication thread” in element 1[o], Petitioner relies on Kakuta’s disclosure of “toolbar 305” that comprises, among other things a “Display” user-selectable control. Pet. 39 (citing Ex. 1005, 8:30–58, 9:23–31, Figs. 4, 12, 16, 19; Ex. 1003 ¶ 104). Petitioner argues that Kakuta discloses invoking “the ‘Display’ tool” and then the first message is “displayed as an anchor message within this subsidiary communication thread.” *Id.* at 39–42 (citing Ex. 1005, 9:23–31, 12:50–61, 14:51–61, 15:1–5, Figs. 7, 12, 16, 19; Ex. 1003 ¶¶ 105–106).

For the second alternative that the recitation of “said second user-selectable control being associated with an indication that said first messaging communication is an anchor message of a subsidiary communication thread” would have been obvious over Kakuta alone and in view of the knowledge of a person of ordinary skill in the art, Petitioner again relies on the “Display” user-selectable control. Pet. 85–86 (citing Ex. 1005, 8:30–58, 9:23–31, Figs. 7, 12; Ex. 1003 ¶¶ 212–213). Petitioner argues that a person of ordinary skill in the art would have recognized that “this user-selectable control inherently indicates the anchor message of the subsidiary communication thread, making this feature obvious” because “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.” *Id.*

For the third alternative that the recitation of “plurality of channel identifiers” would have been obvious over the combination of Kakuta, Matsumoto, and Chang, Petitioner relies on Chang’s disclosure of a user touching a selectable menu item relating to the display function of the private chat areas. Pet. 106–108 (citing Ex. 1007 ¶¶ 203, 270, 296, 299, 318, Fig. 29; Ex. 1003 ¶¶ 265–269). Petitioner argues that a person of ordinary skill in the art would have made its proposed combination to 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.” *Id.*

For element 1[p], Petitioner argues that Kakuta discloses the recitation. Pet. 42–44. Petitioner again relies on Kakuta’s disclosure relating to “toolbar 305” that comprises, among other things a “Display” user-selectable control. *Id.* (citing Ex. 1005, 9:23–31, 12:50–54, 14:1–14, 15:1–5, Figs. 7, 12, 16, 19; Ex. 1003 ¶¶ 108–110). Petitioner argues Kakuta discloses “displaying the first communication message of the second pane also being the first communication message of the subsidiary thread (third pane).” *Id.*

We find that Petitioner’s arguments and evidence for claim elements 1[o] and 1[p] are sufficient for purposes of institution.

2. Analysis of Claims 2–30

Petitioner provides analysis for independent claims 15, 25, and 30. Pet. 67–69, 71–81. Independent claims 15 and 25 are the same as

independent claim 1, except claim 15 is directed to a method and claim 25 is directed to computer-readable media. The features recited in independent claim 30 are similar to features recited in independent claim 1.

Claims 2–14 depend, directly or indirectly, from claim 1; claims 16–24 depend, directly or indirectly, from claim 15; and claims 26–29 depend, directly or indirectly, from claim 25. Petitioner provides a detailed element-by-element analysis for claims 2–14, 16–24, and 26–29. Pet. 44–67, 69–70, 73–74.

We have reviewed Petitioner’s assertions and the evidence in support thereof for claims 2–30. Based on the record at this preliminary stage, we conclude that Petitioner has demonstrated a reasonable likelihood that it would prevail in showing that claims 2–30 are unpatentable.

III. CONCLUSION

For the foregoing reasons, we determine that Petitioner has demonstrated that there is a reasonable likelihood that it would prevail in providing the unpatentability of at least one of the challenged claims of the ’731 patent. We, thus, institute an *inter partes* review of all challenged claims of the ’731 patent on all grounds asserted in the Petition. See 37 C.F.R. § 42.108(a).

Any findings or conclusions in this Decision are made only for the purposes of institution and are not dispositive of any issue. We have not made a final determination with respect to the patentability of any challenged claim. Our final determination will be based on the record as fully developed during trial, including any evidence or argument timely presented by the parties under our Rules.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that pursuant to 35 U.S.C. § 314, *inter partes* review of claims 1–30 of U.S. Patent No. 11,973,731 B2 is *instituted* with respect to all grounds of unpatentability set forth in the Petition; and

FURTHER ORDERED that *inter partes* review is commenced on the entry date of this Order, and pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is given of the institution of a trial.

IPR2024-01490
Patent 11,973,731 B2

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