

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LG ELECTRONICS INC.,

Petitioner,

v.

PANTECH CORPORATION

Patent Owner.

Case IPR2023-01271

U.S. Patent No. 7,283,839

PETITION FOR *INTER PARTES* REVIEW

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LIST OF EXHIBITS

Exhibit ("Ex.")	Description
1001	U.S. Patent No. 7,283,839 ("839")
1002	File History of U.S. Patent No. 7,283,839 ("839FH")
1003	Declaration of Dr. Madisetti in Support of Petition for <i>Inter Partes Review</i> of U.S. Patent No. 7,283,839 ("Madisetti")
1004	(Reserved)
1005	U.S. Patent No. 8,020,105 ("Lemay")
1006	U.S. Patent No. 7,765,263 ("Alfke")
1007	P.C.T. Patent App. Publication No. W.O. 2003/056789 ("Maguire")
1008	U.S. Patent Publication No. 2002/0152220 ("Kang")
1009	Network Working Group, Internet Engineering Task Force (IETF), Request For Comments (RFC): 2822, Internet Message Format (2001) ("RFC2822")
1010	Declaration of Nathaniel E. Frank-White dated April 26, 2023
1011	U.S. Patent No. 6,359,877 ("Rathonyi")
1012	U.S. Patent Publication No. 2003/0229672 ("Kohn")
1013	U.S. Patent Publication No. 2003/0220978 ("Rhodes")
1014	U.S. Patent Publication No. 2005/0275633 ("Varanda")
1015	U.S. Patent Publication No. 2004/0137884 ("Engstrom")
1016	P.C.T. Patent App. Publication No. W.O. 2004/056137 ("Nielson")
1017	U.S. Patent Publication No. 2001/0021649 ("Kinnunen")

Exhibit ("Ex.")	Description
1018	Network Working Group, Internet Engineering Task Force (IETF), Request For Comments (RFC): 2779, Instant Messaging / Presence Protocol Requirements (2000) ("RFC2779")
1019	3GPP Technical Specification 24.011 version 5.2.0, Point-to-Point (PP) Short Message Service (SMS) Support on Mobile Radio Interface (2003)
1020	3GPP Technical Specification 23.140 version 6.4.0, Multimedia Messaging Service (MMS); Functional Description; Stage 2 (2003)
1021	Wireless Application Protocol (WAP), MMS Encapsulation Protocol version Jan. 5, 2002 (2002) ("WAP MMS Encapsulation Protocol")
1022	Network Working Group, Internet Engineering Task Force (IETF), Request For Comments (RFC): 1889, RTP: A Transport Protocol for Real-Time Applications (1996) ("RFC1889")
1023	U.S. Patent Publication No. 2005/0193345 ("Klassen")
1024	U.S. Patent No. 7,383,307 ("Kirkland")
1025	U.S. Patent Publication No. 2004/0097248 ("Schmidt")
1026	U.S. Patent No. 6,333,973 ("Smith")
1027	Joint Claim Construction and Prehearing Statement, <i>Pantech Corp. et al. v. LG Electronics Inc. et al.</i> , Case 5:22-cv-00113-RWS-JBB (E.D. Texas), Dkt. No. 118.
1028	Docket Navigator "Time to Trial" report for Judge Robert W. Schroeder
1029	Claim Construction Expert Report of Charles Mauro CHFP Concerning Certain Terms of U.S. Patent Nos. 7,283,839 And 9,575,631, <i>Pantech Corp. et al. v. LG Electronics Inc. et al.</i> , Case 5:22-cv-00113-RWS-JBB (E.D. Texas) (June 23, 2023).

Exhibit ("Ex.")	Description
1030	Third Amended Docket Control Order, <i>Pantech Corp. et al. v. LG Electronics Inc. et al.</i> , Case 5:22-cv-00113-RWS-JBB (E.D. Texas), Dkt. No. 98.
1031	USCourts.gov "U.S. District Court – Judicial Caseload Profile" for Eastern District of Texas
1032- 1034	(Reserved)
1035	Declaration of Jonathan Bradford

TABLE OF ABBREVIATIONS

Abbreviation	Description
'839	U.S. Patent No. 7,283,839 (Ex. 1001)
'839FH	File History of U.S. Patent No. 7,283,839 (Ex. 1002)
Alfke	U.S. Patent No. 7,765,263 (Ex. 1006)
Claims / Challenged Claims	Claims 1-2 of the '839
Engstrom	U.S. Patent Publication No. 2004/0137884 (Ex. 1015)
Kang	U.S. Patent Publication No. 2002/0152220 (Ex. 1008)
Kinnunen	U.S. Patent Publication No. 2001/0021649 (Ex. 1017)
Kirkland	U.S. Patent No. 7,383,307 (Ex. 1024)
Klassen	U.S. Patent Publication No. 2005/0193345 (Ex. 1023)
Kohn	U.S. Patent Publication No. 2003/0229672 (Ex. 1012)
Lemay	U.S. Patent No. 8,020,105 (Ex. 1005)
Madisetti	Declaration of Dr. Madisetti (Ex. 1003)
Maguire	P.C.T. Publication W.O. 2003/056789 (Ex. 1007)
Nielson	P.C.T. Publication W.O. 2004/056137 (Ex. 1016)
Rathonyi	U.S. Patent No. 6,359,877 (Ex. 1011)
RFC1889	Network Working Group Request for Comments: 1889. RTP: A Transport Protocol for Real-Time Applications (Ex. 1022)
RFC2779	Network Working Group Request for Comments: 2779. Instant Messaging / Presence Protocol Requirements (Ex. 1018)

Abbreviation	Description
RFC2822	Network Working Group Request for Comments: 2822. Internet Message Format (Ex. 1009)
Rhodes	U.S. Patent Publication No. 2003/0220978 (Ex. 1013)
Schmidt	U.S. Patent Publication No. 2004/0097248 (Ex. 1025)
Smith	U.S. Patent No. 6,333,973 (Ex. 1026)
TS 24.011	3GPP Technical Specification TS 24.011 v5.2.0 (2003-06) (Ex. 1019)
Varanda	U.S. Patent Publication No. 2005/0275633 (Ex. 1014)
Petitioner	LG Electronics Inc.
PO	Patent Owners; Pantech Corporation
POSITA	Person of Ordinary Skill in the Art
PTAB	Patent Trial and Appeal Board
USPTO	United States Patent and Trademark Office

CHALLENGED CLAIMS

[1.pre] A wireless communication terminal having a function of providing an integrated messaging service, the wireless communication terminal comprising:

[1.a] a wireless transceiver for transceiving a message to/from an outside device through a wireless network;

[1.b] a storage for storing an integrated messaging service program and messages in order to provide an integrated user interface (IUI);

[1.c] a keypad for receiving a message content and a menu selecting signal in the IUI;

[1.d] a displayer for displaying the message content and description data in the IUI; and

[1.e(i)] a controller for providing the IUI to the keypad and the displayer by operating the integrated messaging service program,

[1.e(ii)] determining a message kind of the message to be transmitted which is inputted in the IUI,

[1.e(iii)] generating an outgoing message including identification data corresponding to the message kind,

[1.e(iv)] transmitting the outgoing message,

[1.e(v)] displaying the message content and the description data of the outgoing message in the IUI,

[1.e(vi)] determining a message kind of a received message,

[1.e(vii)] dividing the received message into a message content and description data,

[1.e(viii)] displaying the message content and the description data in the IUI,

[1.e(ix)] and controlling elements in the wireless communication terminal.

[2] The wireless communication terminal as recited in claim 1, wherein the description data include incoming/outgoing description data in order to present whether the message is transmitted or received.

Pursuant to §§311-319 and §42.1, LG ELECTRONICS INC. (“Petitioner”) petitions for *inter partes* review (“IPR”) of claims 1-2 (“Claims”) of U.S. Patent 7,283,839 (“’839”) (Ex. 1001), assigned to Pantech Corporation (“PO”).¹ There is a reasonable likelihood that at least one Claim is unpatentable as explained herein. Petitioner requests review of the Claims, and judgment finding them unpatentable under §§102/103.

I. INTRODUCTION

The ’839 is directed to wireless communication terminals for “transmitting and receiving different kinds of messages,” such as “text message[s]” and “multimedia message[s],” in an “integrated messaging service program.” ’839, 1:55-62. The Claims recite a wireless communication terminal with a controller that provides an integrated user interface (IUI) to a keyboard and display, determines the message kind of a message to be transmitted, includes in the outgoing message data corresponding to that message kind, determines the message kind of a received message, and displays the message content and message description data—*e.g.*, a time-stamp or message sender—for both the outgoing and received message. During

¹ Section cites are to 35 U.S.C. (pre-AIA) or 37 C.F.R. as context indicates. All emphasis/annotations added unless noted. All citations herein are exemplary and not meant to be limiting.

prosecution, the Examiner allowed the Claims, stating that the prior art considered by the Examiner did not disclose a controller providing those features and controlling elements of the terminal. Ex. 1003 (“Madisetti”), ¶¶31–32.

But controllers providing such features were known in the art. For example, **Lemay** (Ex. 1005) discloses a unified user interface for instant messaging and email on a cellular telephone that processes and displays incoming and outgoing message content along with message sender and time-stamp information. Lemay, Abstract, 1:39-62, 5:16-33, 5:55-6:20. Madisetti, ¶¶32–33.

As another example, **Maguire** (Ex. 1007) discloses a mobile device with an integrated application for email, SMS, WAP, and other message kinds that includes information specifying message kinds in message headers, and uses such header information on incoming messages to determine a message kind, and displays the messages and their description data. Maguire, [0004], [0012], [0029], Fig. 3. Madisetti, ¶34.

Claims 1-2 are disclosed and rendered obvious by these references and others as set forth in the grounds herein. Madisetti, ¶35. Petitioner requests that the Board institute trial and find Claims 1-2 unpatentable.

II. MANDATORY NOTICES (§42.8)

A. Real Party-In-Interest

Petitioner LG Electronics Inc., and LG Electronics U.S.A., Inc. are the real parties-in-interest. No other parties had access to or control over the present Petition, and no other party funded or participated in preparation of the present Petition.

B. Related Matters

The '839 is currently the subject of the following district court litigations:

Pantech Corporation et al. v. LG Electronics Inc. et al., No. 5:22-cv-00113-RWS-JBB (E.D. Tex.) (“Texas case”).

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Petitioner consents to electronic service of documents to the email addresses of the counsel identified above.

III. PAYMENT OF FEES

The undersigned authorizes the Office to charge the fee required by §42.15(a) and any additional fees that might be due to Deposit Account No. 18-1945, under Order No. 104537-0034-651.

IV. REQUIREMENTS FOR INTER PARTES REVIEW

A. Grounds for Standing

Pursuant to §42.104(a), Petitioner certifies the '839 is available for IPR. Petitioner is not barred or estopped from requesting IPR challenging the Claims of the '839 on the grounds identified herein.

B. Identification of Challenge

Pursuant to §42.104(b), Petitioner requests IPR of Claims 1-2, and that the Board cancel the same as unpatentable.

1. The Specific Art on Which the Challenge Is Based

Petitioner relies upon the following prior art:

Name	Patent/ Title	Ex.	Priority Date	Published/ Issued	Prior Art Under at Least
Lemay	US 8,020,105	1005	12/19/2003	09/13/2011	§102(e)
Alfke ²	US 7,765,263	1006	12/19/2003	07/27/2010	§102(e)
Maguire	WO2003/056789A1	1007	12/23/2002	07/10/2003	§102(b)
Kang	US2002/0152220	1008	04/10/2002	10/17/2002	§102(b)
RFC2822	Internet Message Format	1009	N/A	2001	§102(b)

Madisetti, ¶¶54–55.

RFC2822 was publicly accessible to, and indeed accessed by, POSITAs and interested researchers at least as of 2001: it was published and disseminated by The

² **Lemay** incorporates by reference (“Alfke”). Lemay, 11:33-41. To the extent PO disputes whether **Alfke** is part of **Lemay**’s disclosure, Petitioner alternatively contends, for each ground based on **Lemay**, that it would have been obvious to modify **Lemay** with **Alfke**’s teachings in light of the incorporation. Madisetti, ¶57.

Internet Society; made publicly available on The Internet Society website; indexed on the Internet Society Website by number, author, title, and date; and searchable on the on the Internet Society Website by number, author, title, and/or keywords. Ex. 1010 (Declaration of Nathaniel E. Frank-White); Kohn (Ex. 1012), [0025] (“(RFC) 2822 document...specifies a syntax” for “electronic mail.”); Rhodes (Ex. 1013), [0039] (“Internet message format (e.g., as specified in IETF RFC2822).”). Madisetti, ¶¶58–64.

C. Statutory Grounds on Which the Challenge Is Based

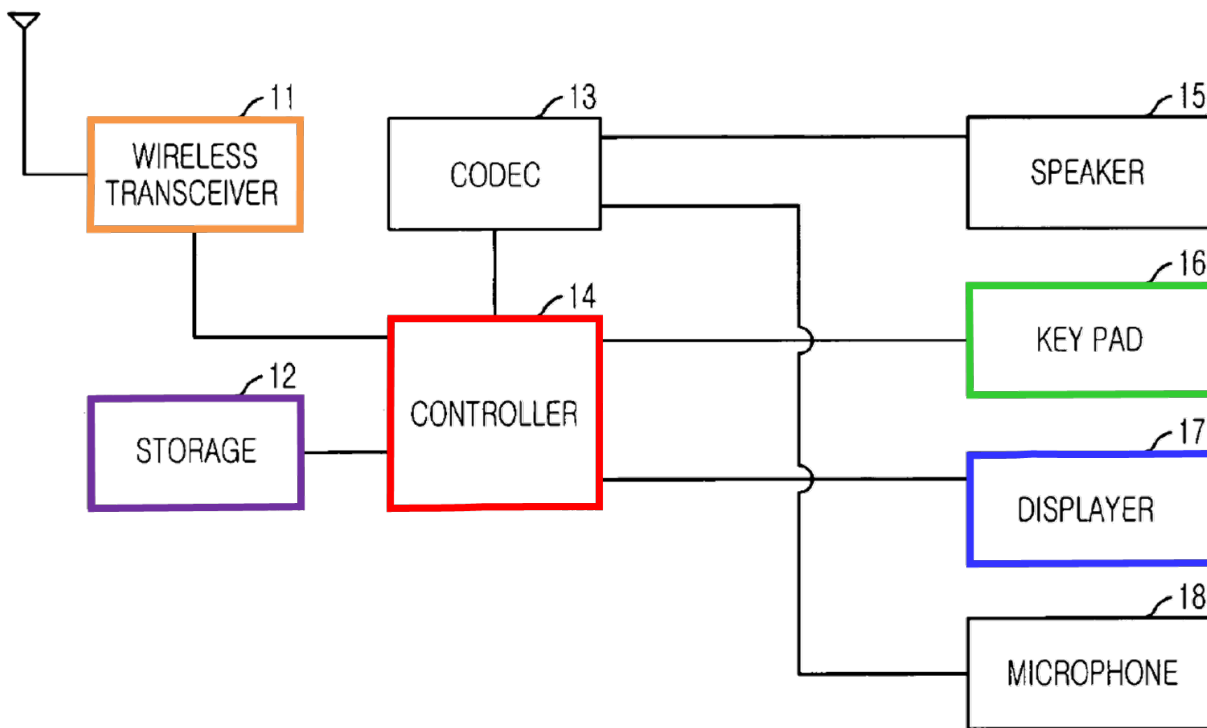
Petitioner respectfully requests cancellation of Claims 1-2 under each of the following grounds:

Ground	Basis	References
1	§§102/103	Lemay
2	§103	Maguire in view of Kang
3	§103	Lemay in view of RFC2822
4	§103	Maguire in view of Kang and RFC2822

Madisetti, ¶¶54-65.

V. ’839 PATENT AND PROSECUTION HISTORY

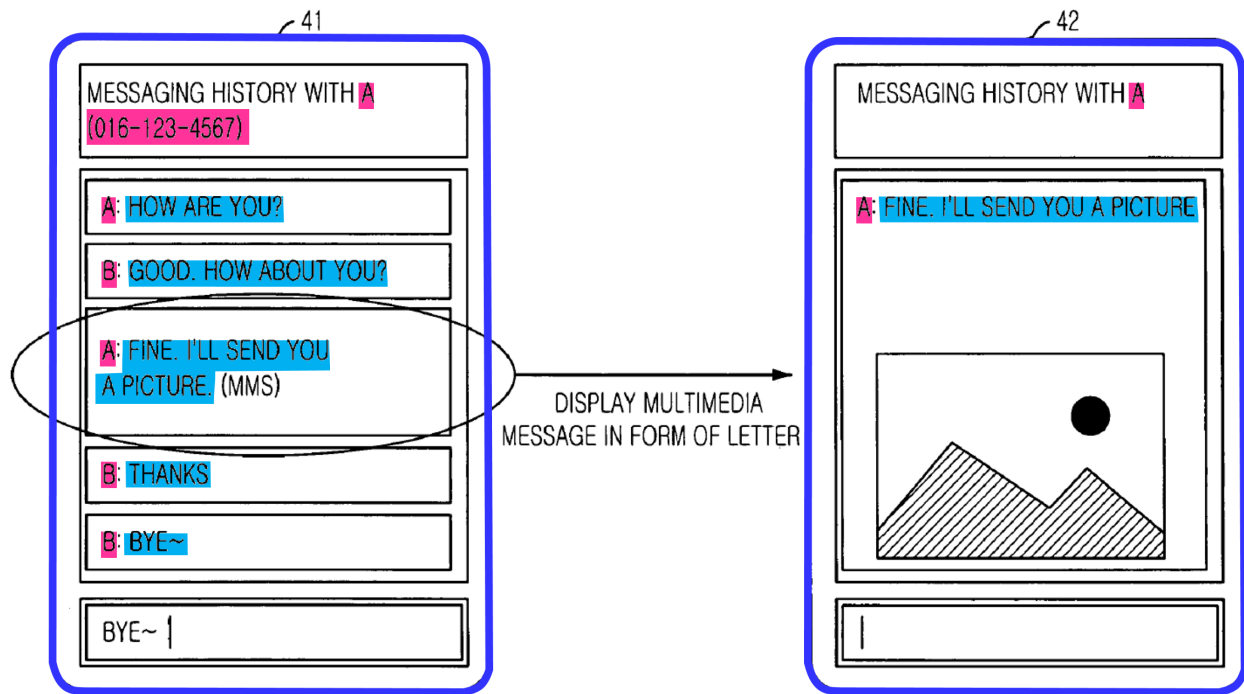
Claims 1-2 generally recite a wireless communication terminal providing an integrated messaging service. ’839, 1:55-62, Cls. 1-2. Fig. 1 shows an embodiment:



'839, Fig. 1; Madisetti, ¶¶36–37. The terminal comprises a “**transceiver**,” “**storage**,” “**keypad**,” “**displayer**,” and “**controller**.” ’839, 1:63-2:8, 3:15-19. The **keypad** receives user input of a message, and message content and description data are displayed on the **displayer** within an “integrated user interface (IUI).” ’839, 1:63-2:8, 3:38-58.

The **controller** provides the IUI to the **keypad** and **displayer** by operating an integrated messaging program. ’839, 1:63-2:8, 3:38-58. For outgoing messages, the **controller** determines a message kind, *e.g.*, based on whether the message to be transmitted includes a multimedia file. ’839, 2:8-11, 3:38-58, 4:14-25; Madisetti, ¶¶37–38. The **controller** generates the outgoing message to include “identification data” corresponding to that message kind, and transmits the message. ’839, 2:8-11,

4:37-42; Madisetti, ¶38. The **controller** also displays the **message**, including **description data** of the message such as data “identify[ing] transmitted/received message[s],” as shown in Fig. 4b below:



'839, 4:43-63, 6:22-32; Madisetti, ¶38. Similarly, for incoming messages, the **controller** uses “identification data” to determine a message type, “divides” the message into **message content** and **description data**, and displays these in the **displayer**. '839, 2:14-17, 3:38-58, 4:47-53, 5:25-28, 5:32-38, 5:43-51. Madisetti, ¶39.

During prosecution, following an initial restriction requirement and election, the '839 issued without further rejections. *See* '839FH (Ex. 1002), 256–59, 262–67, 271–74. The Examiner’s NOA states that the Claims were allowed because the

considered art did not teach the controller elements recited in [1.e(i)]-[1.e.(ix)].
'839FH, 275–78. Madisetti, ¶¶40–42.

Petitioner provides the information required under §§42.104(b)(4)-(5) in §IX.

VI. THE BOARD SHOULD NOT EXERCISE ITS DISCRETION TO DENY INSTITUTION

A. §325(d)

Under the two-part Advanced Bionics framework, the Board should not exercise discretion.

The grounds raised by this Petition are not the same or substantially the same as the art and arguments raised during '839's prosecution. There were no rejections issued, and **Lemay, Maguire, Kang**, and **RFC2822** were not considered. These references' disclosures of, *e.g.*, [1.e(i)]-[1.e.(ix)] are not substantially similar to those the Examiner considered. *See* §IX.

Even if the art or arguments were substantially the same, the Examiner erred in a manner material to the patentability of the Claims. Because the Examiner “did not expressly consider” **Lemay, Maguire, Kang**, or **RFC2822** as prior art, it is “impossible ... to determine the consideration the Examiner gave” to these (or substantially similar) references; “the absence of further evidence of the Examiner’s consideration of” the art demonstrates that “the Office erred in a manner material to patentability”—as confirmed by the strength of these references’

teachings. See §IX; *Ecobee Techs. v. Causam Enterprises, Inc.*, IPR2022-01339, Pap. 20, *20-21 (declining to exercise §325(d) discretion).

B. §314(a)

The co-pending litigation also does not warrant exercising discretion under §314(a) based on the *Fintiv* factors.

1: Following institution, Petitioner intends to seek a stay of the Texas Case pending the outcome of this IPR.

2: Though the Texas Case trial is currently set for 7/29/2024, based on median time to trial before the presiding judge over the last 5 years, trial is expected 26 months from the 9/2/2022 filing date, in late 11/2024 (median time to trial in the entire district varies between 19 and 24 months).³

3: The Texas Case is in its early stages; the court has not ruled on the initial motion to dismiss and discovery has just begun.

4: After the final written decision, the same grounds and arguments could not be presented in the Texas Case.

5: The Texas Case and PTAB parties are the same.

³ Exs. 1028, 1030-31.

6: The merits of this Petition are compelling as shown herein. Processing and displaying different types of messages in a unified interface were well known in the field—indeed, Lemay anticipates the Claims. *See* §§I, IX.

VII. LEVEL OF ORDINARY SKILL

A person of ordinary skill in the art (“POSITA”), at the time the ’839 or its parent applications were filed, would have had a minimum of a bachelor’s degree in electrical or computer engineering or computer science, or a related field, along with at least two years of professional experience in messaging services for wireless communication terminals. Additional graduate education could substitute for professional experience, or significant experience in the field could substitute for formal education. Madisetti, ¶¶43–46. Pantech’s proposed alternative definition (Ex. 1029, ¶27) is overly narrow (e.g., ignoring the transmission/reception of messages and protocol-specific features (*see* ’839 1:8-50, 5:42-59, claims 1-4)), but nonetheless the Claims are unpatentable under either definition. Madisetti, ¶¶47–49.

VIII. CLAIM CONSTRUCTION

Claim terms subject to IPR are to be construed using *Phillips*. §42.100(b); *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005). Only terms necessary to resolve the controversy need to be construed. *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor*, 868 F.3d 1013, 1017 (Fed. Cir. 2017). Because the prior art asserted herein discloses embodiments within the indisputable scope of the claims,

the Board need not construe the outer bounds of the claims. All claim terms should be construed according to their plain and ordinary meaning as would have been understood by a POSITA in view of the specification. Madisetti, ¶¶50–51.

A. [1.pre]

The prior art discloses [1.pre] regardless of whether it is limiting. *See* §IX. Madisetti, ¶52.

B. “the description data” ([2])

“[T]he description data” may refer to “description data” recited in [1.d], [1.e.v], [1.e.vii], and/or [1.e.viii]. But as demonstrated below, Claim 2 is unpatentable under any reasonable interpretation of this term. *See* §IX. Madisetti, ¶53.

IX. GROUNDS OF UNPATENTABILITY

As explained below, the Claims are unpatentable as anticipated or obvious. This Petition is supported by Dr. Madisetti’s declaration, which describes the prior art’s scope and content at the time of the ’839. Madisetti, ¶¶1–30, 65.

A. Ground 1: Lemay (Claims 1-2)

1. Lemay⁴

Lemay discloses “cellular telephones” with a “**processing unit**” coupled to display and I/O controllers, “**input/output devices**,” “**memory**” and “**non-volatile storage**,” a “**network interface**,” and a “**display**.” Lemay, 1:18-22, 1:49-62, 2:52-3:23, 4:5-49, 6:21-25, 6:65-7:9, 9:20-28; Alfke, 3:65-4:10, 5:23-49, 9:6-10, Fig. 2A; Madisetti, ¶¶66–67. Fig. 1B shows an embodiment:

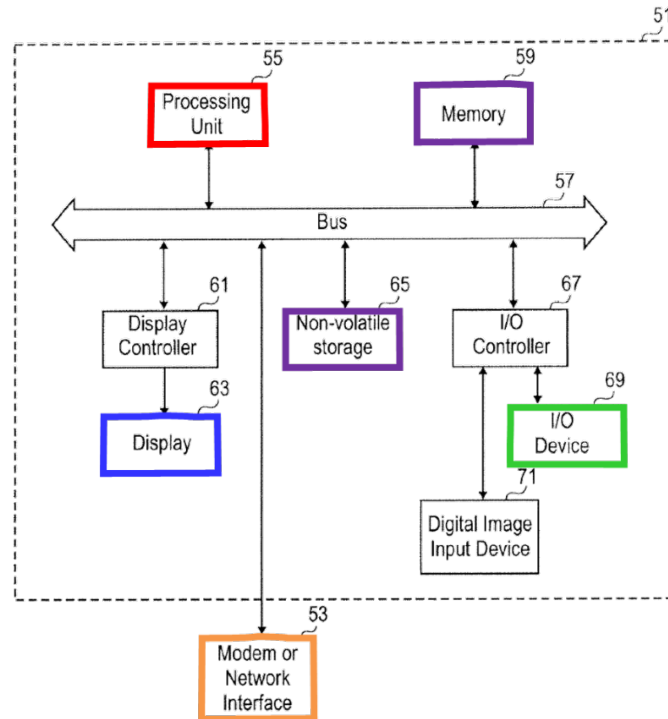


FIG. 1B

⁴ **Lemay** incorporates by reference **Alfke**. Lemay, 11:33-41; *see also* Alfke, 11:4-12 (incorporating Lemay). Madisetti, ¶¶66.

Lemay's **processor** executes “software” to generate a “unified user interface” in the **display** for different message types including, *e.g.*, “instant messaging” and “email” messages. Lemay, 1:18-22, 4:21-49, 5:16-33. The phone sends different types of messages—*e.g.*, “email” and “instant” messages. Lemay, 1:18-22, 1:63-2:3, 2:66-3:23, 9:29-52, 11:8-32. The system determines whether to send emails as instant messages based on whether the recipient is online: the system continuously monitors whether the recipient is online and, if so, determines that each outgoing email message should be repackaged, tagged with “identification” information specifying that the “message being delivered is an email message,” and sent as an instant message. Lemay 6:26-42; Alfke, 5:50-6:4, 6:17-36, 7:24-38, 7:49-63, 8:6-34, 13:25-40. Similarly, “when an incoming message is received,” the message is “examined” to determine the message type and how it should be displayed. Alfke, 2:21-29, 6:17-36, 8:35-44, 12:39-46; Madisetti, ¶68. Fig. 2C shows an example unified interface displaying multiple types of messages:

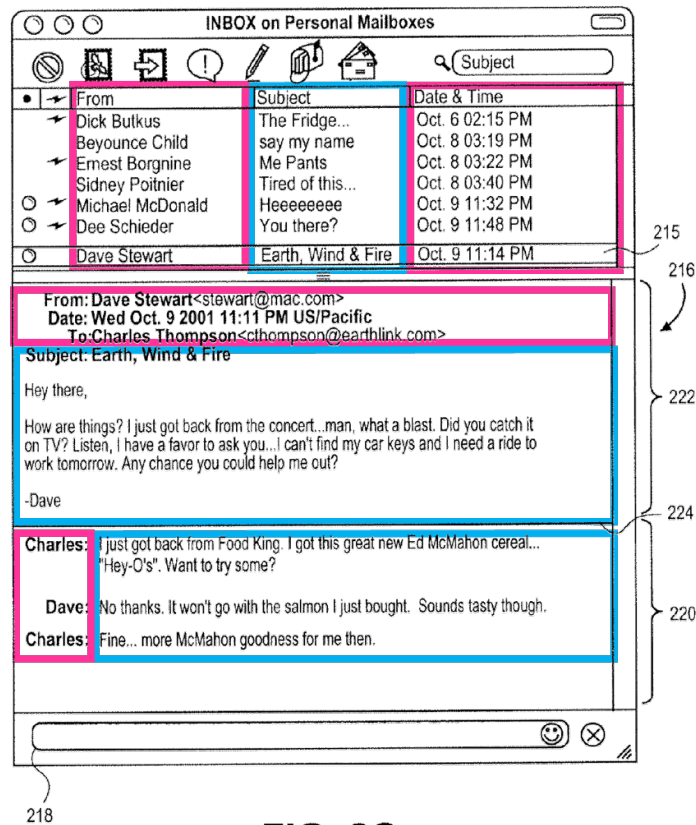


FIG. 2C

Lemay's user interface includes a "table of contents (TOC)" of "messaging records,"⁵ and panes for showing "email content 222" and "instant messaging content 220." Lemay 5:16-33, 5:56-6:20, 6:65-7:9, 8:57-9:4. For both sent and received messages, **Lemay** displays both the **message contents**, alongside the "**date**

⁵ Although Fig. 2C illustrates a TOC for incoming emails, **Lemay** discloses that a similar display can incorporate outgoing messages, and for example, "may also include instant messaging sessions, and messaging records including both email and instant messaging content." Lemay 8:57-9:4; Madisetti, ¶69.

and time” and “the name of the user from which the record originated” that identifies whether messages were sent or received. Lemay, 5:16-65, 6:65-7:23. Madisetti, ¶¶69.

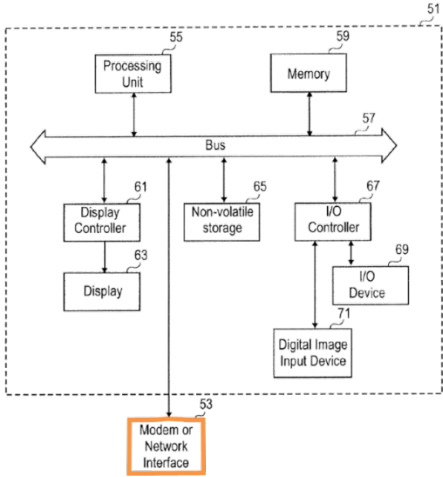
2. Claim Chart

'839	U.S. Patent No. 8,020,105 (“Lemay”)
[1.pre] A wireless communication terminal having a function of providing an integrated messaging service, the wireless communication terminal comprising:	Lemay discloses a wireless communication terminal (e.g., “cellular telephone[]”) having a function of providing an integrated messaging service (e.g., providing a “unified user interface” for displaying “instant messages,” “email,” and other “messaging records”). <u>E.g., Lemay:</u> Lemay discloses “cellular telephones” equipped with “a unified user interface for instant messaging and electronic mail,” and other media messages. Lemay, Abstract, 1:49-62, 2:52-65, Fig. 2C. Madisetti, ¶¶70–72. Lemay, Figs. 1B, 2C, 3-4 FIG. 1B FIG. 2C

'839	U.S. Patent No. 8,020,105 ("Lemay")
	<pre> graph TD 300([UNIFIED EMAIL AND IM 300]) --> 302[DISPLAY TOC OF MESSAGES 302] 302 --> 304[SELECT AN EMAIL MESSAGE 304] 304 --> 306{ASSOCIATED USER AVAILABLE FOR IM? 306} 306 -- NO --> 307[DISPLAY EMAIL MESSAGE 307] 306 -- YES --> 308[DISPLAY INPUT FIELD WITH EMAIL MESSAGE 308] 308 --> 310{INITIATE IM SESSION? 310} 310 -- NO --> 307 310 -- YES --> 312[DISPLAY IM CONTENT WITH EMAIL MESSAGE 312] 312 --> 314[STORE IM CONTENT WITH EMAIL MESSAGE 314] 314 --> 307 307 --> END([END]) </pre> FIG. 3 The screenshot shows a window titled "INBOX on Personal Mailboxes". It contains a list of email entries with columns for "From", "Subject", and "Date & Time". Below the list is a chat interface showing a conversation between "Dave" and "Bob". FIG. 4 • Lemay, Abstract (“<i>The present invention relates to a unified user interface for instant messaging and electronic mail. In one aspect, a single user interface is provided to allow a user to view email and instant messages. Instant messages and email are received and displayed within a common window within a single application.</i>”) • Lemay, 1:49-62 (“<i>The present invention relates to a unified user interface for instant messaging and electronic mail....Instant messages and email are received and displayed within a common window within a single application. ...</i>”) • Lemay, 2:52-65 (“<i>... One of skill in the art will immediately appreciate that the invention can be practiced with other computer system configurations, including hand-held devices, cellular telephones, multiprocessor systems, microprocessor-based or programmable consumer electronics/appliances,</i>

'839	<u>U.S. Patent No. 8,020,105 (“Lemay”)</u>
	<i>network PCs, minicomputers, mainframe computers, and the like. ...”)</i> • Lemay, 5:30-33 (“<i>A table of contents (TOC) pane 202 lists messaging records.....</i>”). • See also Lemay, Figs. 2D, 3, 5:16-6:20, 8:14-33, 8:57-9:4, 9:29-52, 11:8-17.
[1.a] a wireless transceiver for transceiving a message to/from an outside device through a wireless network;	Lemay discloses a wireless transceiver (<i>e.g.</i>, “wireless” “network interface” for “cellular telephone[]”) for transceiving a message to/from an outside device (<i>e.g.</i>, “transmitting and/or receiving” “instant messaging” and “email” messages with other “systems”) through a wireless network (<i>e.g.</i>, through a “wireless network”). <u>E.g., Lemay:</u> <i>See</i> [1.pre]. Lemay further discloses using a “wireless” “network interface” for “transmitting and/or receiving” email and instant messages over “wireless” networks to/from other “systems.” Lemay, Fig. 1B, 1:18-22, 2:52-3:23, 4:6-21; Alfke, Fig. 2A, 5:23-49, 9:52-10:3. This interface includes a transceiver because it both transmits and receives messages. <i>Id.</i> At minimum, a POSITA would have found it obvious to use a transceiver for transmitting and receiving messages as transceivers were commonly used for this purpose.⁶ <i>Id.</i>; Madisetti, ¶75. Thus, Lemay not only renders obvious, but affirmatively discloses, that network interface includes a transceiver. <i>Id.</i> Madisetti, ¶¶73–75.

⁶ *See, e.g.*, Rathonyi (Ex. 1011), 1:33-39, 15:64-66.

'839	U.S. Patent No. 8,020,105 ("Lemay")
	Lemay, Fig. 1B  FIG. 1B Lemay, 1:18-22 (“<i>This disclosure relates generally to user interfaces for processing (e.g., generating, storing, displaying or otherwise presenting, transmitting and/or receiving, etc.) electronic communication....</i>”) Lemay, 2:52-65 (<i>see [1.pre]</i>) Lemay, 2:66-3:23 (“FIG. 1A shows <i>several computer systems 1</i> that <i>are coupled together through a network 3, such as the Internet. ... Access to the Internet allows users of the client computer systems to exchange information, receive and send emails and instant messages, and view documents, such as documents which have been prepared in the HTML format. ...</i>”) Lemay, 3:41-67 (“...The ISP 5 provides <i>Internet connectivity to the client computer system 21 through the modem interface 23</i> which can be considered part of the client computer system 21. <i>The client computer system can be ... a handheld device</i> [E]ach of these <i>interfaces can be</i> an analog modem, ISDN

'839	<u>U.S. Patent No. 8,020,105 ("Lemay")</u>
	modem, DSL modem, cable modem, <i>satellite transmission interface</i>, or other interfaces...") • Lemay, 4:14-21 ("<i>The computer system 51 interfaces to external systems through the modem or network interface 53. ... This interface 53 can be ... satellite transmission interface</i>, or other interfaces for coupling ... to other computer systems.") • <i>See also</i> Lemay, 11:8-17.

'839

U.S. Patent No. 8,020,105 ("Lemay")

• Alfke, Figs. 2A-2C

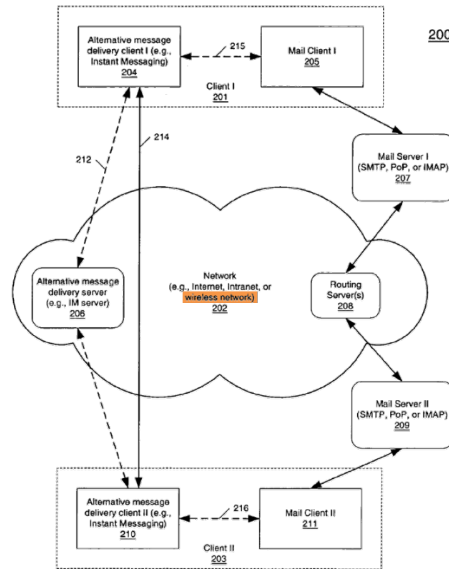


Fig. 2A

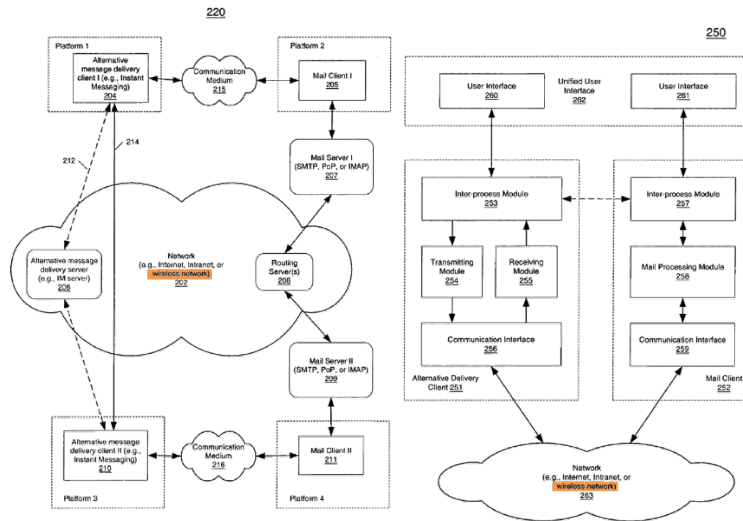


Fig. 2B

Fig. 2C

- Alfke, 5:23-49 (“*The interfaces 106 and 108, shown as modems 106 and 108, respectively, may represent ... a wireless interface ... for coupling a digital processing system, such as a client computer system, to another digital processing system.*”)

'839	<u>U.S. Patent No. 8,020,105 (“Lemay”)</u>
	• Alfke, 9:52-10:3 (“... <i>[C]ommunication medium 215 may be a wireless connection, such as, for example, an infrared or a home networking connection (e.g., IEEE 802.xx, such as Bluetooth or WiFi).</i>”) • <i>See also</i> Alfke, 5:50-6:4, 6:37-56, 15:51-16:13 (“wireless network”/“cellular network”), Fig. 1.
[1.b] a storage for storing an integrated messaging service program and messages in order to provide an integrated user interface (IUI);	Lemay discloses a storage (e.g., “memory” or “non-volatile storage”) for storing an integrated messaging service program in order to provide an integrated user interface (IUI) (e.g., for “stor[ing]” “a computer program” and “messaging record[s]” to provide a “unified user interface” for messaging and email). <u>E.g., Lemay:</u> <i>See</i> [1.pre]. Lemay also discloses storing, in “memory” and “non-volatile storage,” a “computer program” and “messaging record”—each of which not only renders obvious, but affirmatively discloses, that the memory/non-volatile storage is a storage for both the program and messages—to provide the “unified user interface for instant messaging and electronic mail.” Lemay, Fig. 1B, 1:49-62, 4:21-49, 9:20-28; Alfke, 3:65-4:10, 9:6-10. Madisetti, ¶¶76–78.

'839	U.S. Patent No. 8,020,105 ("Lemay")
	Lemay, Figs. 1B, 3 FIG. 1B FIG. 3 Lemay, Abstract, 1:49-62 (<i>see [1.pre]</i>) Lemay, 4:21-49 (“... <i>The computer system 51 includes a processing unit 55... The bus 57 couples the processor 55 to the memory 59 and also to non-volatile storage 65 and to display controller 61 and to the input/output (I/O) controller 67. The display controller 61 controls in the conventional manner a display on a display device 63 which can be a cathode ray tube (CRT) or liquid crystal display (LCD). The input/output devices 69 can include a keyboard...and other input and output devices, including a mouse or other pointing device. The display controller 61 and the I/O controller 67 can be implemented with conventional well known technology. ... The non-volatile storage 65 is often a magnetic hard disk, an optical disk, or another form of storage for large amounts of data. Some of this data is often written, by a direct memory access process, into memory 59 during execution of software in the computer system 51....</i>”)

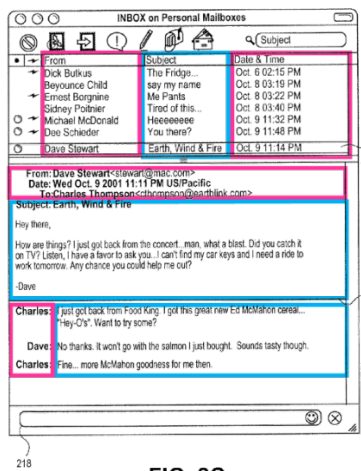
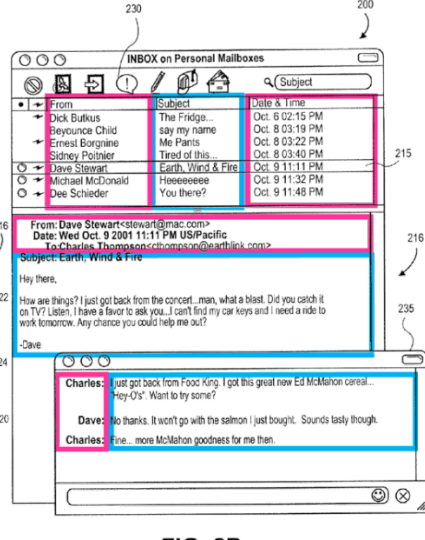
'839	U.S. Patent No. 8,020,105 ("Lemay")
	• Lemay, 9:20-28 (<i>"In one embodiment, a user may initiate an instant messaging session by inputting text into the input field (Block 310). If a chat is initiated, the instant messaging content is displayed with the email message in the preview pane (Block 312). In one embodiment, as instant messaging replies are sent and received by the user, the messaging content is updated in the preview pane. The instant messaging content is stored along with the email message as a single messaging record (Block 314)."</i>) • See also Lemay, 5:3-15, 6:21-25, 7:10-23, 8:27-32. • Alfke, Fig. 7 <pre> graph TD 704[Cache] <--> 703[Microprocessor] 703 <--> 702[Bus] 702 <--> 707[ROM] 702 <--> 705[Volatile RAM] 702 <--> 706[Nonvolatile Memory (e.g. hard drive)] 702 <--> 708[Display Controller & Display Device] 702 <--> 709[I/O Controller(s)] 709 <--> 710[I/O Device(s) (e.g. mouse, or keyboard, or modem, or network interface, or printer)] </pre> • Alfke, 3:66-4:22 (<i>"This apparatus may be ... a general purpose computer selectively activated or reconfigured by a computer program stored in the computer. Such a computer program may be stored in a computer readable storage medium...."</i>) • Alfke, 9:6-10 (<i>"Furthermore, if IM client 210 determines that mail client 211 is not running, IM client 210 may simply store the message at a storage (e.g., a hard drive) of the recipient 203..."</i>)

'839	<u>U.S. Patent No. 8,020,105 (“Lemay”)</u>
	• <i>See also</i> Alfke, 4:23-30, 4:58-5:2.
[1.c] a keypad for receiving a message content and a menu selecting signal in the IUI;	Lemay discloses a keypad for receiving a message content (e.g., “keyboard” used to “receive input, such as text” for messages) and a menu selecting signal in the IUI (e.g., use keyboard to press “a button or setting in a preferences menu” in the IUI (<i>see</i> [1.b])). <u>E.g., Lemay:</u> <i>See</i> [1.pre], [1.b]. Lemay discloses implementing its device as a “handheld device,” and it includes a “keyboard” “input/output device[]” used to enter message content in an “input field” and select “a button or setting in a preferences menu.” Lemay, 3:41-67, 4:21-49, 6:21-25, 6:65-7:9, 10:63-11:12. This not only renders obvious, but affirmatively discloses, that the handheld device integrates a keypad for receiving message content from the user—as was well-understood to a POSITA.⁷ Lemay, 2:52-65, 3:39-50. Madisetti, ¶¶79–81.

⁷ Indeed, mobile devices using keypads were well-known. *E.g.*, Varanda (Ex. 1014) ¶¶1, 3, 70, Figs. 11-15; Engstrom (Ex. 1015) ¶5; Nielson (Ex. 1016) 3:15-25; Kinnunen (Ex. 1017) ¶15. Madisetti, ¶81.

'839	U.S. Patent No. 8,020,105 ("Lemay")
	Lemay, Figs. 1B, 2C FIG. 1B FIG. 2C Lemay, 3:41-67 (<i>See [1.a]</i>), 4:21-49 (<i>see [1.b]</i>) Lemay, 6:21-25 (“In one embodiment, <i>an input object includes functionality to receive input, such as text entered from a keyboard, or handwriting entered through the use of a pen or stylus.</i> In other embodiments, input object may include functionality for <i>receiving other input, such as video or audio.</i>”) Lemay, 6:65-7:9 (“FIG. 2C illustrates an embodiment of the GUI of FIG. 2B including instant messaging content 220. In one embodiment, <i>where a user initiates an instant messaging session by typing in the input field 218, the content of the ensuing instant messaging session is displayed in pane 216.</i> ... In another embodiment, <i>instant messaging content 220 appears in a separate pane from the pane 216 displaying the email content 222.</i>”) Lemay, 7:45-49 (“[A] user may initiate an instant messaging session which is displayed in pane 216 <i>by clicking on a button.</i>”)

'839	<u>U.S. Patent No. 8,020,105 (“Lemay”)</u>
	• Lemay, 10:63-11:12 (“[A] user may disable or ‘turn off’ the instant messaging capabilities of the GUI and the associated application. ... For example, <i>a button or setting in a preferences menu</i> may be used to control this feature.”) • <i>See also</i> Lemay, 9:20-27, 10:25-41.
[1.d] a displayer for displaying the message content and description data in the IUI; and	Lemay discloses a displayer (<i>e.g.</i>, “display”) for displaying the message content and description data (<i>e.g.</i>, for displaying instant messaging and email “content,” and the name of the “user from which the record originated” and a “time”) in the IUI (<i>see</i> [1.b]). <u><i>E.g., Lemay:</i></u> <i>See</i> [1.pre], [1.b]-[1.c]. Lemay further discloses that the GUI on the “display” displays sent and received “instant messaging” and “email” content. Lemay, 5:16-6:20, 6:65-7:23, 8:57-9:4. The display also displays description data message “date and time,” and “the name of the user from which the record originated,” <i>i.e.</i>, a messaging correspondent. Lemay, 5:16-6:20, Figs. 2A-2D. Indeed, the ’839 embodiments use similar description data. ’839, 4:47-61 (“data for indicating the incoming message or the outgoing message,” “sender/recipient name”). Madisetti, ¶¶82–84. To the extent required, it would have been obvious for this description data to be included in messages. For example, it was well-understood that messages include sender/receiver addresses and/or names (to be displayed as a correspondent’s “name”), and that messages include time-stamps. <i>See</i>

'839	U.S. Patent No. 8,020,105 (“Lemay”)
	Lemay, 5:16-6:20, 6:65-7:23, Figs. 2A-2D; Madisetti, ¶85.⁸ And when a message does not have an associated name, it would have been obvious to display the correspondent’s address/number instead. <i>See</i> Lemay, 5:16-6:20; Alfke, 15:51-67. Madisetti, ¶85. • Lemay, Figs. 2C-2D  FIG. 2C  FIG. 2D • Lemay, Abstract (<i>see</i> [1.pre]), 4:21-49, 9:20-28 (<i>see</i> [1.b]), 6:65-7:9 (<i>see</i> [1.c]) • Lemay, 5:16-6:20 (“... <i>FIG. 2A illustrates an embodiment of a unified graphical user interface (GUI) for instant messaging and email. As illustrated, the unified GUI, which is typically displayed as a</i>

⁸ For example, RFC2779 defines the “common message format” for interoperable “instant messaging” programs, which “MUST identify the sender and intended recipient.” RFC2779 (Ex. 1018), 1, 9; *see also* RFC2822, 14-16; Ex. 1019, 31; Ex. 1020, 30-31, 50, 57; Ex. 1021, 23; Ex. 1022, 1. Madisetti, ¶85.

'839	<u>U.S. Patent No. 8,020,105 (“Lemay”)</u>
	<i>window 200 on a display of a computer or other digital processing system</i>, includes a number of display and control functions for processing messaging records. ... <i>The window 200 includes a plurality of panes, which separate the window 200 into portions. A table of contents (TOC) pane 202 lists messaging records....</i> <i>The TOC 202 includes columns which contain information for each record. Column 204 indicates the status of a record.... Column 208 displays the name of the user from which the record originated. Column 210 displays the subject of the corresponding record, and column 212 displays the date and time of the record....</i> <i>... Preview pane 216 displays the content of a record 215 which is selected in the TOC 202....</i> <i>... [I]n the embodiment illustrated in FIG. 2B, when the email record from Dave Stewart is selected in the TOC 202, the email message content will appear in the preview pane 216....”)</i> • Lemay, 7:10-23 (“In one embodiment, <i>the instant messaging content 220 is combined with the email content 222 to create a combined messaging record including both email and instant messaging content....”)</i> • Lemay, 8:57-9:4 (“Although <i>FIGS. 2A-2C</i> are illustrates embodiments using an Inbox, it will be appreciated that embodiments of the present invention may be applied to other folders, such as for example a Sent folder, or other user generated folders. <i>...A list or table of contents (TOC) of messaging records is displayed by the method 300 (Block 302). For example, in one embodiment, the list is the TOC 202 illustrated in FIGS. 2A-2C. In addition to email messages, the TOC may also include instant</i>

'839	<u>U.S. Patent No. 8,020,105 (“Lemay”)</u>
	<i>messaging sessions, and messaging records including both email and instant messaging content...”)</i> • <i>See also Lemay, Figs. 2A-2B, 1:18-22, 9:53-10:10, 11:8-17.</i> • <i>Alfke, 15:51-67 (“...[A]pplication 601 may also be capable of receiving wireless instant messages, such as SMS (short message service) messages ... and displays the message as a mail message in an Inbox of the recipient's mail. ...”)</i>
[1.e(i)] a controller for providing the IUI to the keypad and the displayer by operating the integrated messaging service program,	Lemay discloses a controller for providing the IUI to the keypad and the displayer by operating the integrated messaging service program (e.g., “processor” executes “software in the computer system” to generate the “user interface” to the keypad and the “display”). <u>E.g., Lemay:</u> <i>See [1.pre], [1.b]-[1.d].</i> Lemay also discloses a “processor” coupled to a “display controller” and “input/output (I/O) controller,” which executes “software in the computer system” to generate, and thus provide, the “user interface” to the keypad and the “display.” Lemay Figs. 1B, 2C, 1:49-62, 4:21-49, 6:65-7:9. Madisetti, ¶¶86–88.

'839

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• **Lemay, Figs. 1B, 2C-2D, 3-4**

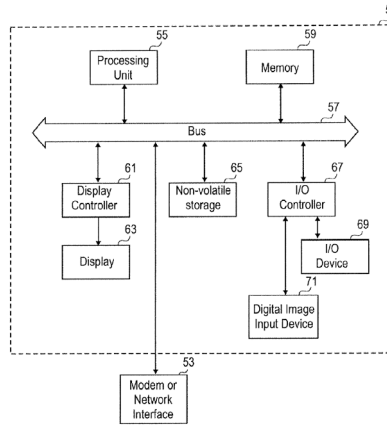


FIG. 1B

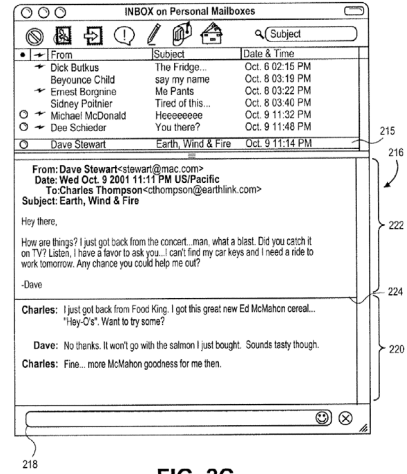


FIG. 2C

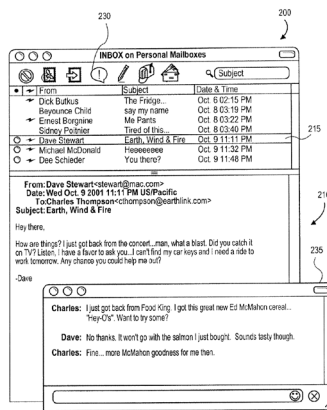


FIG. 2D

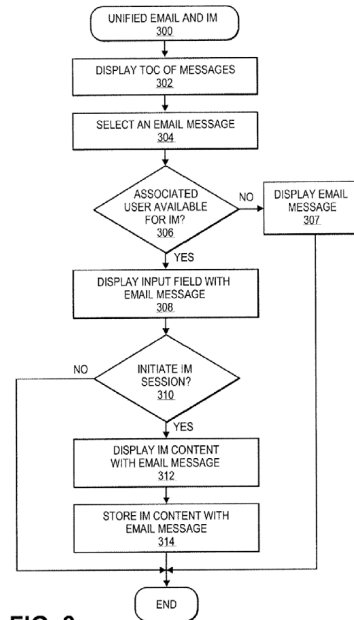
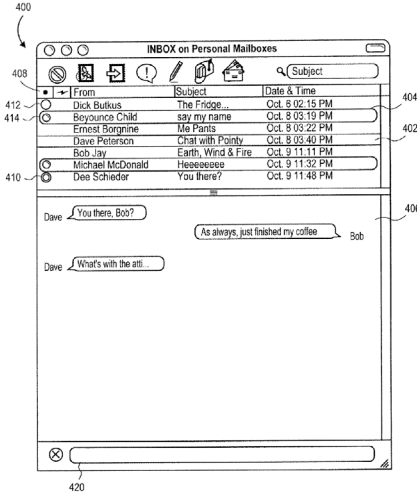
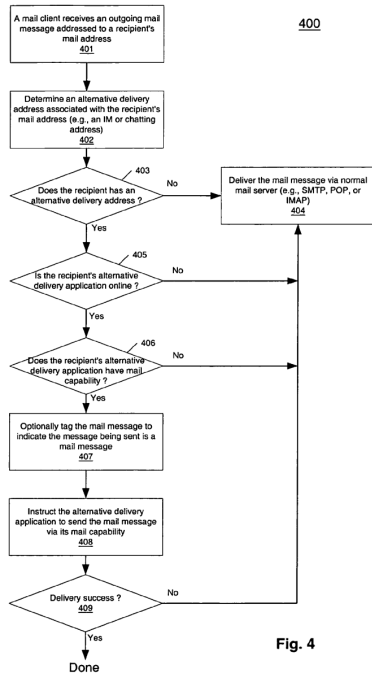


FIG. 3

'839	U.S. Patent No. 8,020,105 ("Lemay")
	 FIG. 4 • Lemay, Abstract, 1:49-62 (<i>see</i> [1.pre]), 4:21-49 (<i>see</i> [1.b]), 6:21-25, 6:65-7:9 (<i>see</i> [1.c]) • Lemay, 5:3-15 (“<i>[T]he computer system 51 is controlled by operating system software which includes a file management system.... The file management system is typically stored in the non-volatile storage 65 and causes the processor 55 to execute the various acts required by the operating system to input and output data and to store data in memory, including storing files on the non-volatile storage 65.</i>”) • See also Lemay, 1:18-22, 2:52-65, 6:24-44.
[1.e(ii)] determining a message kind of the message to be transmitted which is inputted in the IUI,	Lemay discloses determining a message kind of the message to be transmitted which is inputted in the IUI (<i>e.g.</i>, determining whether to transmit an inputted message as an “email” or “instant message[]”). <u>E.g., Lemay:</u> <i>See</i> [1.pre]-[1.b], [1.e(i)].

'839	<u>U.S. Patent No. 8,020,105 (“Lemay”)</u>
	Lemay’s teachings of packaging messages, and tagging contained message types, each disclose this element. Lemay discloses that the online status of the recipient is used to “determine[]” whether to send email messages using “standard email systems,” or to “repackage[]” the mail message to be sent using the “alternative delivery mechanism”—e.g., “instant message[]”—type of message. Lemay 2:66-3:23, 6:26-42; Alfke, 5:50-6:4, 6:17-36, 7:49-63, 8:6-34, 11:29-58, 13:25-40. This determination of whether to send emails as instant messages discloses this element. Madisetti, ¶91. Additionally, messages transmitted by the alternative delivery mechanism are inspected to determine whether to tag them as emails instead of instant messages; this determination also meets this element. Alfke 6:17-36, 8:6-34. Madisetti, ¶¶89–91. • Lemay, Figs. 2C, 2D, 3 FIG. 2C FIG. 2D

'839	U.S. Patent No. 8,020,105 ("Lemay")
	<pre>graph TD 300([UNIFIED EMAIL AND IM 300]) --> 302[DISPLAY TOC OF MESSAGES 302] 302 --> 304[SELECT AN EMAIL MESSAGE 304] 304 --> 306{ASSOCIATED USER AVAILABLE FOR IM? 306} 306 -- NO --> 307[DISPLAY EMAIL MESSAGE 307] 306 -- YES --> 308[DISPLAY INPUT FIELD WITH EMAIL MESSAGE 308] 308 --> 310{INITIATE IM SESSION? 310} 310 -- NO --> END([END]) 310 -- YES --> 312[DISPLAY IM CONTENT WITH EMAIL MESSAGE 312] 312 --> 314[STORE IM CONTENT WITH EMAIL MESSAGE 314] 314 --> END</pre> FIG. 3 • Lemay, 1:18-22, 2:66-3:23 (see [1.a]), 9:20-28 (see [1.b]) • Lemay, 1:63-2:3 (“... If the user associated with the email message is available for messaging, messaging session controls are displayed in the first window. <i>The messaging session controls are to send messaging session content to the user or to receive messaging session content from the user.</i>”) • Lemay 6:26-42 (“...In another exemplary embodiment, if a user associated with a record becomes available for instant messaging while the message is currently being browsed, input field 218 appears by animating up (e.g. popping up) from the lower portion of pane 216...”) • Lemay, 9:29-52 (“[D]ropping an email message pastes the text of the email message into the selected

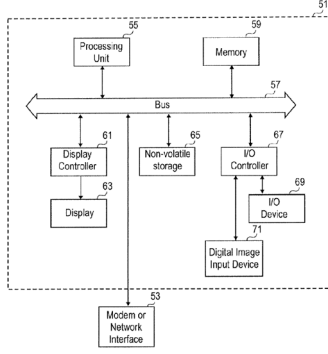
'839	<u>U.S. Patent No. 8,020,105 ("Lemay")</u>
	<i>instant messaging session 402.</i> In another embodiment, dropping the email on an instant messaging record causes <i>the email to be sent</i> to the associated user through a file transfer protocol. <i>Similarly, in another embodiment, an instant messaging record may be dragged and dropped into an new email message,</i> or an instant messaging session, to insert a transcript of the instant messaging session.”) • Lemay, 11:18-32 (“[T]he user interface may incorporate functionality for receiving, sending and managing other types of messaging, such as video chats, video conferencing, or audio communications. ...”) • See also Lemay, 5:16-6:20, 6:26-42, 9:29-52, 10:42-62, 11:8-17. • Alfke, Fig. 4  <pre> graph TD 401[A mail client receives an outgoing mail message addressed to a recipient's mail address] --> 402[Determine an alternative delivery address associated with the recipient's mail address (e.g., an IM or chatting address)] 402 --> 403{Does the recipient have an alternative delivery address?} 403 -- No --> 404[Deliver the mail message via normal mail server (e.g., SMTP, POP, or IMAP)] 403 -- Yes --> 405{Is the recipient's alternative delivery application online?} 405 -- No --> 404 405 -- Yes --> 406{Does the recipient's alternative delivery application have mail capability?} 406 -- No --> 404 406 -- Yes --> 407[Optionally tag the mail message to indicate the message being sent is a mail message] 407 --> 408[Instruct the alternative delivery application to send the mail message via its mail capability] 408 --> 409{Delivery success?} 409 -- No --> 404 409 -- Yes --> Done[Done] </pre> Fig. 4

'839	<u>U.S. Patent No. 8,020,105 ("Lemay")</u>
	• Alfke 5:50-6:4 (“<i>[T]he email systems used by the client computers may be standard email systems, such as email systems using POP3 (post office protocol), SMTP (simple mail transport protocol), or IMAP (Internet message access protocol) protocols. According to one embodiment, the email client running at the client computers 102, 104, 118, and 120 may determine whether there is an alternative message delivery mechanism, such as, for example, instant messaging (IM) system, to deliver the email message quicker.... The alternative delivery mechanism may deliver the email message to the recipient via the alternative delivery system, instead of going through the normal email server....</i>”) • Alfke, 6:17-36 (“<i>[T]o distinguish the email message from other messages delivered by the alternative delivery system, the email message may be tagged with an identification indicating the message being delivered is an email message and repackaged in a format compatible with the message requirement of the alternative delivery system....</i>”) • Alfke, 7:24-38 (“...In one embodiment, when mail client 205 is launched and initialized, <i>mail client 205 may register, via path 215, with IM client 204 to enable mail client 205 to transmit and receive mail messages via IM client 204....</i>”). • Alfke, 7:49-63 (“For example, according to one embodiment, <i>when mail client 205 receives a mail message from a user addressed to mail client 211 of a recipient, mail client 205 determines, without involving corresponding mail server 207, whether there is an alternative messaging system, such as IM client 204, available....</i>”)

'839	<u>U.S. Patent No. 8,020,105 ("Lemay")</u>
	• Alfke, 8:6-34 ("<i>[M]ail client 205 may determine, via alternative messaging system 204, whether the recipient alternative messaging counterpart (e.g., alternative messaging system 210) is capable of handling mail messages. The determination may be performed based on whether the recipient's mail client 211 has successfully registered with its alternative messaging system 210... If the recipient's alternative messaging system is able to handle mail messages, according to one embodiment, mail client 205 may optionally tag an identification with the mail message to indicate that the message being sent is a mail message.... Thereafter, mail client 205 transmits the mail message to alternative messaging client 204 where the mail message may be repackaged in a format compatible with the alternative messaging system (e.g., an IM message packet).... The mail message is then sent to the recipient's alternative messaging counterpart 210 over network 202....</i>") • Alfke 11:29-58 ("<i>[W]hen a sender prepares an outgoing message using user interface 261, user interface 261 transmits the outgoing message to inter-process module 257.... ...If it is determined that the recipient's alternative delivery mechanism is online and capable of handling mail messages, inter-process module 257 transmits the outgoing mail message to the alternative delivery client 251. Otherwise, inter-process module 257 transmits the outgoing mail message ... as an ordinary mail message.</i>") • Alfke, 13:25-40 ("<i>[E]xemplary process 400 includes receiving, at a mail client, a mail message addressed to a mail address of a recipient at a remote site, determining, at the mail client, whether there is an alternative delivery mechanism available for the</i>

'839	<u>U.S. Patent No. 8,020,105 (“Lemay”)</u>
	<i>recipient, delivering the mail message to the recipient via the alternative delivery mechanism, if the alternative delivery mechanism is available, and delivering the mail message to a mail server which forwards the mail message to the recipient, if the alternative delivery mechanism is unavailable.”)</i> • Alfke, 16:1-23 (“[M]ore than one alternative delivery mechanisms, such as, for example, IM, wireless SMS (short message services), two-way paging system, or facsimile application, etc., may be available for the sender to select. <i>The mail client may select from the multiple alternative delivery mechanisms a most appropriate delivery mechanism to deliver the mail message. In one embodiment, the mail client may select the most appropriate delivery mechanism based on an attribute of the mail message, the user configuration, or the user preferences....</i>”) • <i>See also Alfke, 1:17-20, 2:9-20, 5:58-6:16, 6:37-56, 7:39-48, 7:64-8:5, 9:52-10:3, 11:29-58, 13:41-56, 14:10-18.</i>
[1.e(iii)] generating an outgoing message including identification data corresponding to the message kind,	Lemay discloses generating an outgoing message including identification data corresponding to the message kind (e.g., outgoing message is “tagged” to specify “email” or “instant message[]” “alternative delivery system” messages). <u>E.g., Lemay:</u> <i>See [1.pre], [1.e(i)]-[1.e(ii)].</i> As stated for [1.e(ii)], Lemay discloses sending both email messages and other messages through an alternative delivery system (e.g., instant messaging) and tagging emails sent via the alternative delivery system; the information tagging these messages as emails is identification data corresponding to the message kind, and uniquely identifies each as either an

'839	<u>U.S. Patent No. 8,020,105 (“Lemay”)</u>
	email or an instant message when the system is configured to send only those two message types. Lemay, 5:16-6:20; Alfke, 6:17-36, 8:6-34, 16:1-23. Madisetti, ¶¶92–94. • Lemay, 2:66-3:23 (<i>See</i> [1.a]), 5:16-6:20 (<i>see</i> [1.d]) • Alfke, 6:17-36, 8:6-34, 16:1-23 (<i>see</i> [1.e(ii)]) • Alfke, 11:59-12:7 (“<i>[I]nter-process module 253 may further tag the message to indicate that the message is a mail message before transmitting the message to transmitting module 254. Alternatively, the tagging and repackaging may be performed by the mail client 252.</i>”) • <i>See also</i> Alfke, 6:28-36, 12:25-46.
[1.e(iv)] transmitting the outgoing message,	Lemay discloses transmitting the outgoing message (<i>e.g.</i>, “transmitting” “instant messaging replies” or “email”). <u>E.g., Lemay:</u> <i>See</i> [1.pre], [1.e(i)], [1.e(iii)]. Lemay also discloses “transmitting” the email and instant messaging replies to a messaging counterpart. Lemay, 1:18-22, 1:63-2:3, 9:20-52. Madisetti, ¶¶95–97. • Lemay, Fig. 1B

'839	U.S. Patent No. 8,020,105 ("Lemay")
	 FIG. 1B • Lemay, 1:18-22 (<i>see</i> [1.a]), 1:63-2:3, 9:29-52 (<i>see</i> [1.e(ii)]), 9:20-28 (<i>see</i> [1.b])
[1.e(v)] displaying the message content and the description data of the outgoing message in the IUI,	Lemay discloses displaying the message content and the description data of the outgoing message in the IUI (<i>see</i> [1.d]; message content and description data is shown for outgoing messages (<i>see</i> [1.e(iii)])). <u>E.g., Lemay:</u> <i>See</i> [1.pre], [1.b]-[1.e(i)], [1.e(iii)]. As discussed in [1.d], Lemay discloses displaying “instant messaging” and “email content” along with description data including a message “date and time” and the name of the corresponding counterpart for both sent and received message—which includes outgoing messages. <i>See</i> Lemay 5:16-6:20, 6:65-7:9, 7:10-23, 8:57-9:4. Madisetti, ¶¶98–100.

'839

U.S. Patent No. 8,020,105 ("Lemay")

• **Lemay, Figs. 2C-2D, 4**

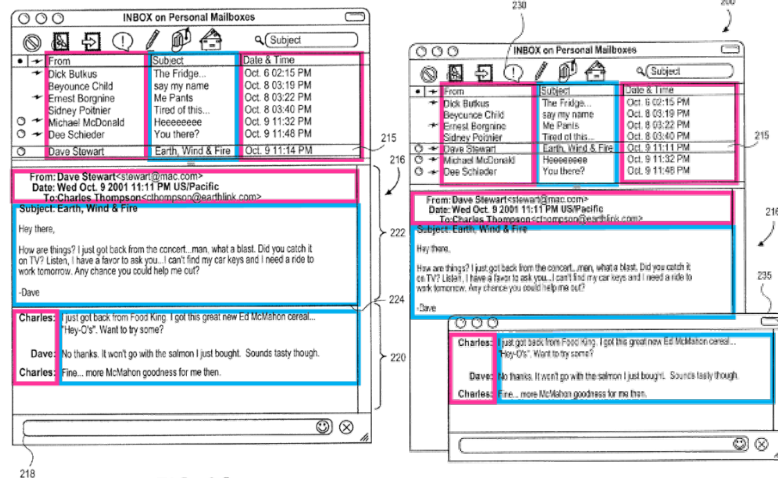


FIG. 2C

FIG. 2D

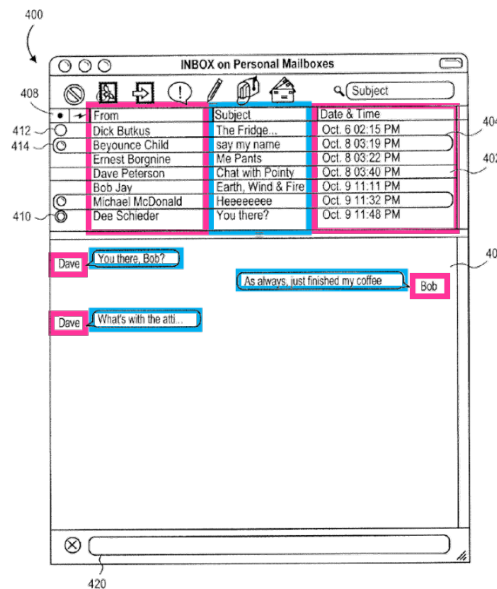


FIG. 4

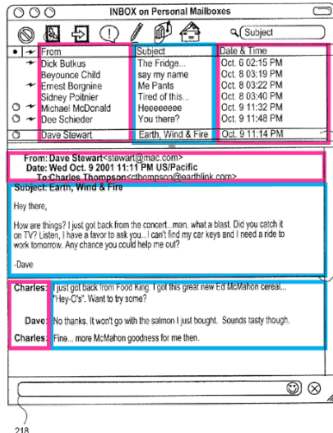
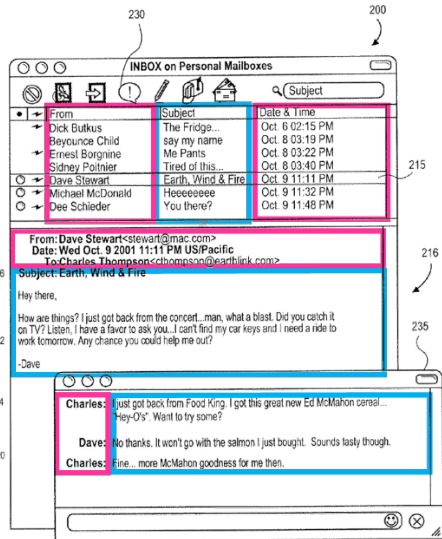
- **Lemay, 1:18-22 (see [1.a]), 4:21-49, 9:20-28 (see [1.b]), 6:65-7:9 (see [1.c]), 5:16-6:20, 7:10-23, 8:57-9:4 (see [1.d])**
- **See also Lemay, Figs. 2A-2B, 6:21-25, 9:53-10:10.**

[1.e(vi)]
determining a
message kind of a

**Lemay discloses determining a message kind of a
received message (e.g., "examin[ing]" "an incoming**

'839	U.S. Patent No. 8,020,105 (“Lemay”)
received message,	message” “to determine whether the message is an email message”). <u>E.g., Lemay:</u> <i>See</i> [1.pre], [1.e(i)]-[1.e(iii)]. Lemay also further discloses that “when an incoming message is received,” it is “examined (via the tagged identification) to determine whether the message is an email message” or another message type—e.g., when configured to exchange only emails and instant messages, the “tagged identification” is used to determine if messages are email or instant messages. <i>See</i> Alfke, 2:21-29, 6:17-36, 8:35-44, 12:39-46; Madisetti, ¶¶101–103. Alfke, Fig. 5 <pre> graph TD 501[Receive an incoming message at a client via a non-mail messaging system of a recipient (e.g., IM or chatting systems)] --> 502[Determine whether the message is a mail message (e.g., examine an identification tagged with the message)] 502 --> 503{Mail message?} 503 -- No --> 504[Deliver the message to a display associated with the non-mail messaging system] 503 -- Yes --> 505{Is mail client running?} 505 -- Yes --> 506[Deliver the incoming message to the mail client, where the message is displayed at the mail client as if it is received from a mail server] 505 -- No --> 508[Optionally launch the mail client] 508 --> 509{Is mail client launched successfully?} 509 -- Yes --> 506 509 -- No --> 510[Return an error to the sender of the incoming message via the non-mail messaging system] 506 --> 507[Return success status to the sender of the incoming message via the non-mail messaging system] </pre> Fig. 5 Alfke, 2:21-29 (“[W]hen an incoming message is received at an alternative messaging system of a recipient, such as an instant messaging (IM) client,

'839	<u>U.S. Patent No. 8,020,105 (“Lemay”)</u>
	<i>the message is examined whether the message is a mail message. ...”)</i> • Alfke, 6:17-36 (<i>see</i> [1.e(ii)]) • Alfke, 8:35-44 (“<i>When the recipient’s alternative messaging system, such as IM client 210 receives the message..., IM client 210 examines the message packets to determine whether the message is an email message. In one embodiment, IM client 210 may examine the identification tagged with the message to determine whether the message is an email message. If the message is determined to be an ordinary IM message, the message is displayed in a display of the IM client 210.</i>”) • Alfke, 12:39-46 (“[T]he message may be directly delivered to the unified user interface 262 by inter-process module 253, where <i>the unified user interface 262 may examine the message (e.g., examining the tagged identification) and display the message accordingly. ...”)</i> • <i>See also</i> Alfke, 1:17-20, 7:24-38, 12:8-38.
[1.e(vii)] dividing the received message into a message content and description data, [1.e(viii)] displaying the message content and the description data in the IUI,	Lemay discloses dividing the received message into a message content and description data (<i>see</i> [1.d]; “processing” messages to separately display content and description data), and displaying the message content and the description data in the IUI (<i>see</i> [1.d]; message content and description data is shown for received messages). <u>E.g., Lemay:</u> <i>See</i> [1.pre], [1.c]-[1.e(i)], [1.e(vi)]. Lemay discloses “processing (<i>e.g.</i>, generating, storing, displaying or otherwise presenting, transmitting and/or receiving, etc.)” incoming communications and presents both

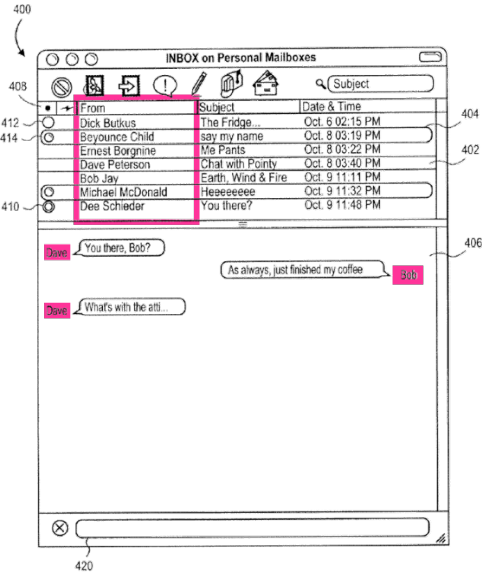
'839	<u>U.S. Patent No. 8,020,105 (“Lemay”)</u>
	message content and description data in the resulting interface. <i>See</i> Lemay, 1:18-22; <i>see also id.</i>, 5:16-6:20, 6:65-7:23. The “instant messaging” and “email content” is displayed separately from description data including the “time” and “name” information in the GUI. Lemay, Figs. 2A-2D, 5:16-6:20, 6:65-7:23. Madisetti, ¶¶104–106. To the extent identification data within the description data must be displayed, it also would have been obvious to display data identifying the message type when the table of contents contains, <i>e.g.</i>, both “email messages” and “instant messaging sessions,” in order to accurately inform the user of each message’s type.⁹ Lemay 8:61-9:4. Madisetti, ¶107. • Lemay, Figs. 2C-2D, 3-4  

⁹ *See, e.g.*, Engstrom, Figs. 3A-3B, [0037]; Klassen (Ex. 1023), Figs. 4-5, [0047]; Varanda, Fig. 5, [0025]-[0026]. Madisetti, ¶107.

'839	U.S. Patent No. 8,020,105 ("Lemay")
	<pre> graph TD 300([UNIFIED EMAIL AND IM 300]) --> 302[DISPLAY TOC OF MESSAGES 302] 302 --> 304[SELECT AN EMAIL MESSAGE 304] 304 --> 306{ASSOCIATED USER AVAILABLE FOR IM? 306} 306 -- NO --> 307[DISPLAY EMAIL MESSAGE 307] 306 -- YES --> 308[DISPLAY INPUT FIELD WITH EMAIL MESSAGE 308] 308 --> 310{INITIATE IM SESSION? 310} 310 -- NO --> END([END]) 310 -- YES --> 312[DISPLAY IM CONTENT WITH EMAIL MESSAGE 312] 312 --> 314[STORE IM CONTENT WITH EMAIL MESSAGE 314] 314 --> END </pre> FIG. 3 FIG. 4 Lemay, 1:18-22 (<i>see</i> [1.a]), 4:21-49, 9:20-28 (<i>see</i> [1.b]), 6:65-7:9 (<i>see</i> [1.c]), 5:16-6:20, 7:10-23, 8:61-9:4 (<i>see</i> [1.d]) Lemay, 9:53-60 (“In one embodiment, a user may sort their messaging records into folders. ... An advantage is that <i>a user may store all related messaging records (email and instant messages) conveniently in a single folder.</i>”) See also Lemay 8:44-56.
[1.e(ix)] and controlling elements in the wireless communication terminal.	Lemay discloses controlling elements in the wireless communication terminal (<i>e.g.</i>, “processor” is coupled to a “display controller” and “the input/output (I/O) controller,” and executes “software in the computer system” to generate the “user interface” in the “display”). <u>E.g., Lemay:</u> <i>See</i> [1.pre]-[1.e(viii)].

'839	U.S. Patent No. 8,020,105 (“Lemay”)
	Lemay’s “processor” is coupled to the “display controller” and “the input/output (I/O) controller” and executes—and therefore controls—“software” to generate the “user interface” in the “display.” Lemay, Figs. 1B, 2C, 1:49-62, 4:21-49, 6:65-7:9. Madiseti, ¶¶108–110. Lemay, Figs. 1B, 2C FIG. 1B FIG. 2C Lemay, 1:49-62, 2:52-65 (see [1.pre]), 1:18-22 (see [1.a]), 4:21-49 (see [1.b]), 6:21-25, 6:65-7:9 (see [1.c]), 5:3-15 (see [1.e(i))]
[2] The wireless communication terminal as recited in claim 1, wherein the description data include incoming/outgoing description data in order to present whether the message is	See [1]. Lemay further discloses wherein the description data (see [1.d], [1.e(v)], [1.e(vii)]) include incoming /outgoing description data in order to present whether the message is transmitted or received (e.g., “the name of the user from which the record originated;” “From” and “To” fields on displayed messages). <u>E.g., Lemay:</u> See ’839 claim 1; [1.pre]-[1.a], [1.d], [1.e(v)], [1.e(vii)]. As discussed in [1.d] and [1.e(v)], for both the primary and alternative messaging systems, Lemay discloses presenting

'839	U.S. Patent No. 8,020,105 ("Lemay")
transmitted or received.	"name" description data that specifies whether the message is sent or received—e.g., based on which name/address is identified as the message originator. Lemay, 5:16-6:20, 6:65-7:9, 8:57-9:4, Figs. 2A-2D. This is true under any interpretation of the term "the description data." Madisetti, ¶¶111–113. • Lemay, Figs. 2A-2D, 4 FIG. 2A FIG. 2B FIG. 2C FIG. 2D

'839	<u>U.S. Patent No. 8,020,105 (“Lemay”)</u>
	 FIG. 4 • Lemay, Abstract (<i>see</i> [1.pre]), 9:20-28 (<i>see</i> [1.b]), 7:10-23, 6:65-7:9 (<i>see</i> [1.c]), 5:16-6:20, 8:57-9:4 (<i>see</i> [1.d]) • See also Lemay, 1:18-22.

B. Ground 2: Maguire in view of Kang (Claims 1-2)

1. Maguire

Maguire discloses a “mobile device” with a “**touch sensitive liquid crystal display**” presenting a “unified view” of sent and received “communications events” including, *e.g.*, “SMS,” “e-mail,” and “wireless application protocol” (“WAP”) messages. Maguire, [0001]-[0004], [0019]-[0020], [0028]; Madisetti, ¶¶114–115.

Fig. 5 shows an embodiment:

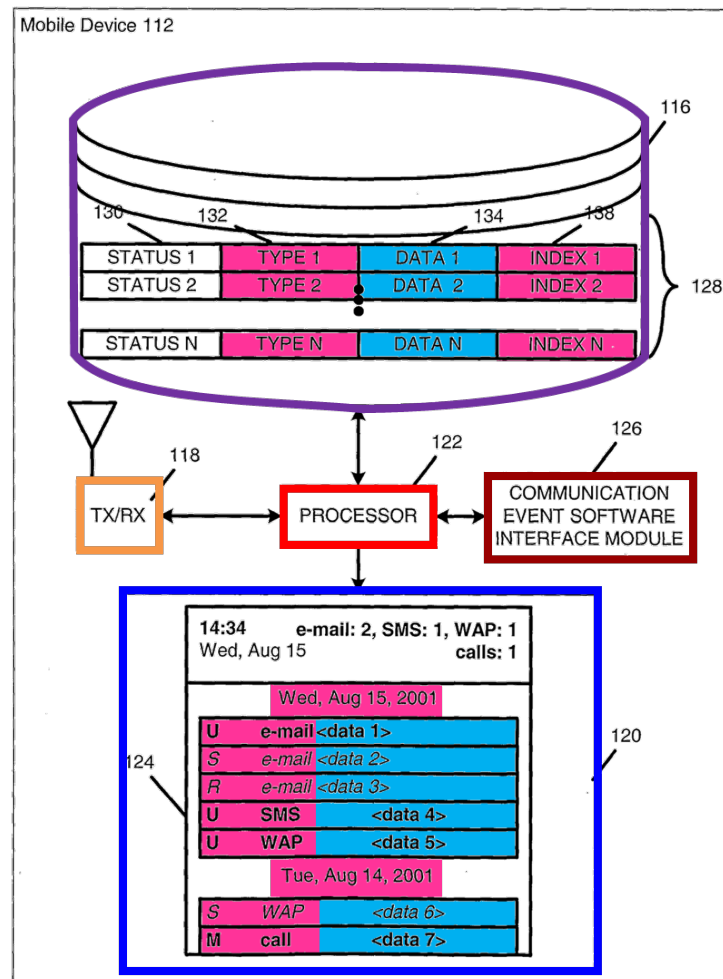


Figure 5

Maguire, Fig. 5; Madiseti, ¶115. The “**processor**” controls the “**transceiver**” to transmit and receive “communications events” over a “cellular network[.]” Maguire, [0003]-[0004], [0013], [0025], [0027]; Madiseti, ¶116. The “**processor**” generates an “interface” for “communications events” on the **display** by executing a “**software interface module**” and accessing, from a “**database**,” the **message body from a “data” field** and **information describing that message**, including message type from the “type” field and “indexing” information for determining a

“communications event history”—which describes information such as the event “date and time” or “time-stamp”—from the “index” field. Maguire, [0013], [0019], [0025]-[0026], [0040], claims 26, 35, 40-41, 54. The **display** displays, for each message, “**the body of the message**” and **data about the message** including an “event type identifier” (*e.g.*, e-mail, SMS, or WAP); “sent” (“S”)/“received” (“R”)/“unread” (“U”) indicators; and a message “date and time.” Maguire, Fig. 5, [0003], [0012]-[0014], [0021]-[0022], [0026], [0028], claims 40-41, 54. Maguire also discloses displaying a “contact name” for a message correspondent. Maguire, [0040]. Madisetti, ¶116.

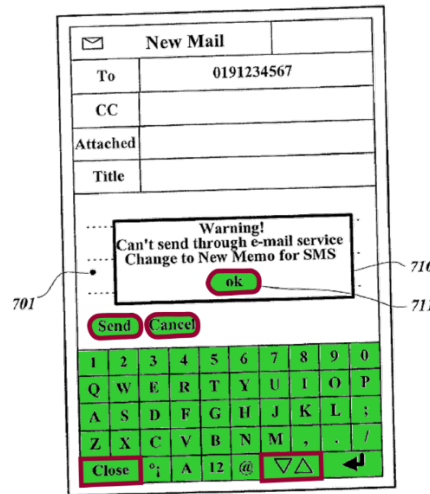
Message types for both incoming and outgoing messages are specified using message “header information” and the “channel” used to send the message, both of which are used to determine a message type for incoming messages. Maguire, [0004], [0019], [0021]-[0022], [0025]-[0026]. Message correspondents are likewise determined by “extracting” the “email” or “originating address” from received messages. Maguire, [0012]-[0014]. Madisetti, ¶117.

2. Kang

Kang discloses a “personal information terminal” having an “I/O module...for inputting[] data.” Kang, [0025]-[0026]. As Fig. 7 illustrates, the user “fill[s] in necessary information as well as a body message” using a **keypad** with both alphanumeric keys and **keys for selecting menu items** such as “Send,”

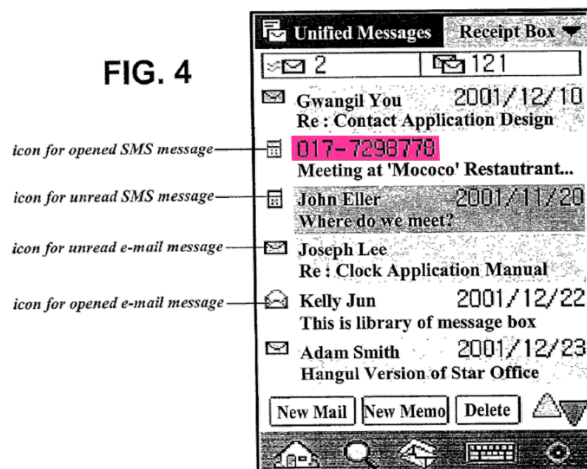
“Cancel,” “ok,” “Close,” and up/down arrows. Kang, Figs. 7-8, [0028], [0059]-[0060]. Madisetti, ¶¶118–119.

FIG. 7



Kang, Fig. 7.

Kang also teaches displaying in “a single window” the “e-mail address” or “telephone subscriber number” for a message correspondent—for example, the second message in Fig. 4 identifies the correspondent using their telephone number, 017-7298778:



Kang, Fig. 4, [0033]-[0035]. Madisetti, ¶120.

While a user enters a message, a “message type checking unit” determines a “message type” by examining the “entered data.” Kang, Fig. 1, [0059]. Depending on message attributes such as length or the format of the number or address, the system determines whether to send the message as, *e.g.*, SMS or an e-mail. Kang, Figs. 6a-6b, 7, [0040], [0042], [0046], [0050], [0059], [0061]. Before sending a message, the terminal determines whether to “change delivery manner” of the message, and then “convert[s]” the message to the appropriate format before sending. *Id.*, Abstract, [0011]-[0012], [0026], [0041]-[0043], [0047]-[0048], [0051], [0059]-[0061], claims 9, 13, 16, 20. Madisetti, ¶121.

3. Motivation to Modify Maguire with Kang’s Teachings

Maguire and **Kang** are analogous prior art in the ’839’s field—messaging services for wireless communication terminals—and are reasonably pertinent to the problems purportedly addressed by the ’839—*e.g.*, the need for “various messaging services” to send messages. ’839, 1:8-15, 1:19-50; Maguire, [0002], [0004], [0020]; Kang, [0002], [0009]. Madisetti, ¶¶122–123.

Maguire broadly teaches sending, receiving, and displaying different kinds of messages on a mobile device interface but does not require a particular input mechanism for messages, or specify a particular way of determining an outgoing message type. *See* Maguire, [0004]-[0005], [0012], [0019], [0028]. A POSITA

therefore would have been motivated to look to **Kang** for its teachings of a well-understood input module (including, e.g., a keypad and inputs for menu selection) that accepts input for and determines different outgoing message types, presenting such messages with associated description data on a display, and similarly processing received messages. Kang Figs. 7-8, 10, [0025]-[0026], [0028], [0040]-[0042], [0045]-[0047], [0058]-[0060]. Madisetti, ¶124.

First, Maguire teaches using “other user interfaces” with its teachings, and that “[i]mplementations of graphical interfaces on ... touch sensitive liquid crystal displays will be well understood by those skilled in the art of mobile device design.” Maguire, [0028]. A POSITA therefore would have been motivated to modify **Maguire** with **Kang’s** more detailed teachings of a known keyboard interface for inputting messages on a mobile device. *See, e.g.,* Kang [0040], [0060], Figs. 7-8, 10. Madisetti, ¶125.

Second, Maguire teaches multiple types of outgoing messages, or “communications events,” but leaves it to a POSITA to determine how to input a message and select the message type used for transmitting outgoing messages. *See* Maguire [0004], [0018]-[0019], [0021]-[0022], [0025]. **Kang** provides additional teachings of a streamlined interface for inputting messages that includes a “message type checking unit” and “converting unit” that allows the user to input different types of messages in a single interface while advantageously avoiding the need to “choose

a message input screen” by automatically selecting a message type before transmission. Kang [0026], [0061]-[0062]; Madisetti, ¶126. A POSITA therefore would have been motivated to modify **Maguire** with **Kang’s** message type checking and converting teachings to advantageously simplify the user experience on the device. Madisetti, ¶126.

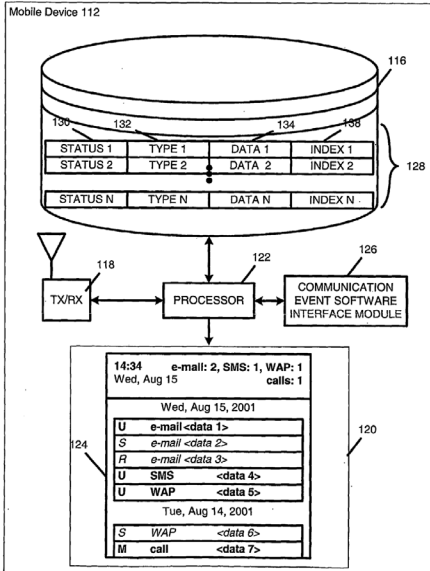
Third, Maguire provides broad teachings of presenting correspondent names in the user interface to identify correspondent partners by, *e.g.*, using a contact name, but does not expressly state how to identify unnamed contacts. Maguire, [0029], [0040]. A POSITA would have been motivated to modify **Maguire** with **Kang’s** interface teachings of displaying email and SMS addresses (*e.g.*, telephone numbers) for incoming messages to advantageously allow a user to identify correspondents for whom a name has not already been assigned, and keep messages from such a correspondent organized. *See* Maguire, [0012], [0026], [0029]; Kang, [0033]-[0035], Fig. 4. Madisetti, ¶127.

A POSITA would have had a reasonable expectation of success in modifying **Maguire** with **Kang’s** teachings because of the well-understood nature of these teachings. *E.g.*, Engstrom, [0019], [0042]; Klassen, [0043]; Kirkland (Ex. 1024), 7:25-43. Indeed, **Maguire** explicitly contemplates applying such teachings to **Maguire**. *E.g.*, Maguire [0028]. Madisetti, ¶128.

4. Claim Chart

In addition to §§IX.B.1–IX.B.3, the following identifies example disclosures followed by bulleted excerpts that each disclose and/or render obvious the Claims.

'839	WO 2003/056789 (“Maguire”) in view of US 2002/0152220 (“Kang”)
[1.pre] A wireless communication terminal having a function of providing an integrated messaging service, the wireless communication terminal comprising:	Maguire discloses a wireless communication terminal (<i>e.g.</i>, “mobile device” on “cellular network[.]”) having a function of providing an integrated messaging service (<i>e.g.</i>, providing a “unified view of communications events” for “messages”). <u>E.g., Maguire:</u> Maguire discloses a wireless “mobile device” on a “cellular network[.]” with a user interface displaying a “unified view of communications events” including, <i>e.g.</i>, sent and received “telephone calls,” “SMS” and “e-mail” messages, WAP messages. Maguire Fig. 5, [0002]-[0004], [0019]-[0020]. Madisetti, ¶¶129–131.

'839	WO 2003/056789 (“Maguire”) in view of US 2002/0152220 (“Kang”)
	• Fig. 5  Figure 5 • [0002]-[0004] (“This invention relates generally to <i>a user interface for messaging</i>. ... <i>Most cellular networks ... support data services</i> in addition to standard telephony based services. <i>Short Messaging Service (SMS) and Wireless Application Protocol (WAP) are data centric services available on many cellular networks</i>. Data networks ... that overlay cellular networks, allow an appropriately configured <i>mobile device to offer data services such as e-mail, web browsing, as well as SMS and Multimedia messaging service (MMS) messaging, and WAP data sessions</i>. <i>Communications events include telephone calls, both sent and received, SMS messages both sent and received, e-mail correspondences both sent and received, and wireless application protocol sessions, among other data based transactions...</i>.) • [0019]-[0020] (“<i>In the present invention a mobile device provides an integrated user interface through which a user can view communications events</i> in which

'839	WO 2003/056789 (“Maguire”) in view of US 2002/0152220 (“Kang”)
	a particular correspondent has partaken.... <i>The present invention provides a unified view of communications events</i>, so that a user can determine the context of any received communications event, or can determine the context of a communications event to be placed....”) • <i>See also</i> [0008], [0011], [0013], [0025], [0026].
[1.a] a wireless transceiver for transceiving a message to/from an outside device through a wireless network;	Maguire discloses a wireless transceiver for transceiving a message to/from an outside device through a wireless network (<i>e.g.</i>, “a transceiver for transmitting and receiving communications events” including “SMS messages” over a “cellular network[]”). <u>E.g., Maguire:</u> <i>See</i> [1.pre]. Maguire’s mobile device further includes a wireless “transceiver for transmitting and receiving communications events,” <i>e.g.</i>, “SMS messages” or “e-mail,” over a wireless “cellular network[]” to/from another mobile device. Maguire [0002]-[0004], [0013]. Madisetti, ¶¶132–134.

'839	WO 2003/056789 (“Maguire”) in view of US 2002/0152220 (“Kang”)
	• Figs. 5-6 Figure 5 Figure 6

'839	WO 2003/056789 (“Maguire”) in view of US 2002/0152220 (“Kang”)
	<i>display 120... Communications event software interface module 126 is preferably a software application executed by processor 122...</i>) • <i>See also</i> [0014], [0026]-[0027], [0031].
[1.b] a storage for storing an integrated messaging service program and messages in order to provide an integrated user interface (IUI);	Maguire discloses a storage (<i>e.g.</i>, “memory”) for storing an integrated messaging service program and messages in order to provide an integrated user interface (IUI) (<i>e.g.</i>, processor executes a stored “software interface module” and retrieves “message” “communications event[s]” from a “database” to provide an integrated “interface” displaying “e-mail, SMS, WAP, and telephone call” “communications”). <u>E.g., Maguire:</u> <i>See</i> [1.pre]. Maguire also discloses a “memory,” and that the “processor” executes a “software interface module” and accesses information stored in a “communications event database.” Maguire, [0013], [0025]-[0026], claim 35. This not only renders obvious, but affirmatively discloses, that the memory stores the software interface module and the communication events database to allow the module and database to be accessible to the processor. Madisetti, ¶137. The processor uses the software interface module and stored communications events to provide an “interface” displaying “e-mail, SMS, WAP, and telephone call” communications. Maguire, Fig. 5, [0025]-[0026], [0040]. Madisetti, ¶¶135–137.

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• Figs. 4-5

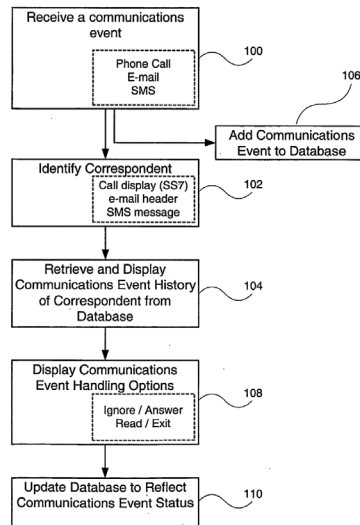


Figure 4

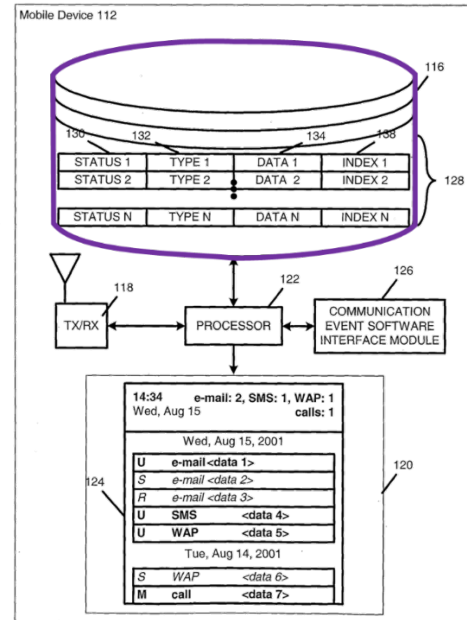


Figure 5

- [0013], [0025] (*see* [1.a])
- [0026] ("*Database 116 is preferably structured to have at least one table 128. In table 128, four data fields are identified. The first identified data field is status 130. Status field 130 indicates whether or not an e-mail or SMS message has been read, or whether or not a telephone call was answered. Type field 132 denotes the type of communications event of the record. Type 132 is used to identify whether the communications event was an e-mail message, a telephone call, or an SMS message. In a presently preferred embodiment, the type field also indicates whether the communications event originated from, or was received by mobile device 112. The third entry in table 128 is data field 134. The data field 134 contains information about the communications event of this record. In a presently preferred embodiment, the data field for a SMS or e-mail message would include the body of the message.*")

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	<i>For a telephone call, in a presently preferred embodiment, data field 134 would indicate the time that the call was placed, and the duration of the call. ... In conjunction with communications event software interface module 126, processor 122 performs the method illustrated in Figure 3. As a result, processor 122 interacts with display 120 upon receipt of a communications event and after querying database 116. Thus, processor 122 uses display 120 to provide interface 124. Interface 124 illustrates a date and time, as well as the number of e-mail, SMS, WAP, and telephone call type communications events between the mobile device and the correspondent. As is illustrated in interface 124, the status field 130, the type field 132, and data field 134 of table 128 are used to provide the user with an indication that unread mail messages exist, sent mail messages, received mail messages and placed calls have been made between the mobile device and the correspondent.”)</i> • [0029]-[0030] (“<i>Processor 122 is connected to the database 116, and is capable of performing database queries on database 116. ... In a presently preferred embodiment of the system illustrated in Figure 4, the communications event software interface module 126 includes a communications event type identifier. The identifier is for determining the type associated with the communications event. The identified type is stored in type field 132 in database 116....</i>”) • [0040] (“... [T]o view all communications events sent to or received from a particular contact, the pre-set criteria may include matching select communications event data with all of the specific contact information found in an address book entry for the contact.... <i>In the entry corresponding to the stockbroker, for example, if</i>

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	<i>the following fields are defined: telephone number, mobile phone number, fax number, email address, and URL’s; then an example preferable mapping to message types follows. ... All communications events, including phone calls, SMS communications events, emails, web communications events, WAP communications events or other communications events that match at least one field in the stockbroker contact entry of the address book would then be selected by the communications event software interface module 126, and would be displayed. Preferably, the presentation of the retrieved data from database 116 would show the contact name, such as ‘stockbroker’ as defined by the preset criteria 142.”)</i> • Claim 35 (“<i>A wireless device, comprising: a viewing screen; a processor; a memory device that stores communication events that have been transmitted or received by the wireless device; and a communication event software interface module executed by the processor that (a) locates one or more select communication events by filtering each communication event stored in the memory device to identify stored communication events matching a pre-set criteria, and (b) displays the one or more select communication events on the viewing screen.</i>”) • See also [0015], [0038], [0041], claims 25, 26.
[1.c] a keypad for receiving a message content and a menu selecting signal in the IUI;	Maguire renders obvious a keypad receiving a message content (e.g., receiving content for “outgoing communications events” including “SMS messages” and “e-mail”) and a menu selecting signal (e.g., “user interface acknowledgement buttons”) in the IUI (e.g., [1.b], the “user interface” is provided on the “display”). <u>E.g., Maguire:</u>

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	<i>See</i> [1.pre], [1.b]. Maguire discloses a device sending “outgoing communications events,” including “SMS messages” and “e-mail.” Maguire [0002]-[0004], [0012], [0019]-[0020]. The device presents a “user interface” for such SMS and email messages using a “touch sensitive liquid crystal display.” Maguire [0019]-[0020], [0028]. This discloses receiving content for the outgoing SMS and email messages, <i>e.g.</i>, using touch-sensitive inputs on the display. Maguire [0028]. Moreover, it would have been obvious to use the well-known concept of a keypad to insert the message content. Madisetti, ¶140.¹⁰ The user further selects menu items on a display using, <i>e.g.</i>, “acknowledgement buttons” in the interface. Maguire [0028]. Madisetti, ¶¶138–140. • [0002]-[0004], [0019]-[0020] (<i>see</i> [1.pre]) • [0012] (“In an embodiment of the first aspect of the present invention, <i>the step of identifying is preceded by the step of determining a communications event type for the communications event</i>... In embodiments of the present invention, receiving an incoming communications event and identifying the correspondent includes one of..., <i>receiving an incoming email message and extracting an email address from the header of an email message and receiving an incoming short messaging service (SMS) message and extracting an originating address from a SMS message</i>. In a further embodiment of the present invention, <i>identifying the correspondent further includes cross referencing one of the extracted phone number, the extracted email address and the extracted originating address, with</i>

¹⁰ *See supra* note 7.

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	<i>entries in an address book accessible to the mobile device. ...”)</i> • [0028] (“<i>Display 120 is preferably a liquid crystal display, and may optionally be a touch sensitive liquid crystal display, so that a user can be provided with user interface acknowledgement buttons on the screen of the device itself. ...”)</i>) • <i>See also</i> [0014], [0021], [0026]. To the extent further disclosure is required, Kang further discloses a keypad (e.g., Figs. 7, 8 keypad) for receiving a message content (e.g., keyboard used by “an I/O module for inputting[] data”) and a menu selecting signal (e.g., signal from “Send” and “Cancel” “menu items”). <u>E.g., Kang:</u> Maguire does not require a particular input mechanism for receiving user input for messages. Kang further discloses a “personal information terminal” having an “I/O module...for inputting[] data” by a user. Kang [0025]-[0026]. Message content is input by “filling in necessary information as well as a body message in fields of the message input screen” using a keypad including menu buttons including, e.g., “Cancel,” “Send,” “ok,” “Close,” and navigation arrow buttons. Kang Figs. 7-8, [0028], [0060]. Indeed, the ’839 similarly describes a user selecting “transmit/receive” menu items, and using “soft key[s].” ’839, 5:63-66, 7:10-21. Madisetti, ¶¶141–143. As discussed in §IX.B.3, a POSITA would have been motivated to modify Maguire with Kang’s input teachings based on Maguire’s explicit teachings of looking to other references for user interfaces and to provide a well-

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understood input mechanism for users. Maguire [0028]. Madisetti, ¶143.

- **Figs. 7-8, 10**

FIG. 7

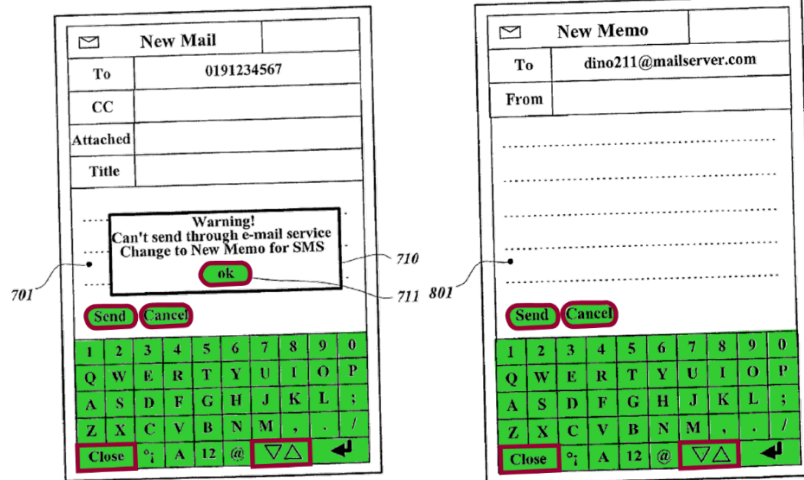
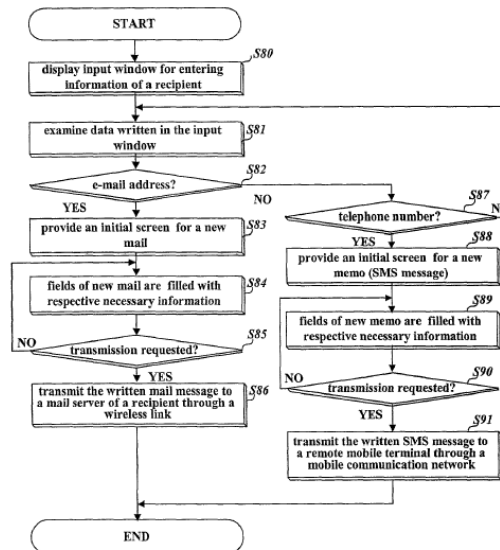


FIG. 10



- [0026] (“In details, the I/O module 10 includes a wide LCD 11 for displaying information and a touch

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	<i>screen 12 for data input,... and a controlling unit 26 supervising operations of all elements overall.”)</i> • [0028] (“First, <i>the controlling unit 26 displays a variety of built-in application programs and menu items onto the wide LCD 11 to be selected by a user (S10).</i>”) • [0040] (“<i>First, the controlling unit 26 checks which application item is selected through the touch screen 12 by a user (S40). If a ‘New Mail’ item is chosen by the user (S41) because an e-mail is intended to send, the controlling unit 26 provides an initial screen for a new mail which includes ‘To’, ‘CC’, ‘Attached’, ‘Title’ field, and message input window 701, as shown in FIG. 7 (S42).... Afterwards, the user writes a message to send in the message input window 701. Through these filling-in works, a mail message to send is completed (S43).</i>”) • [0059]-[0060] (“<i>After data is entered in the input window completely, the controlling unit 26 commands the message type checking unit 21 to examine the entered data (S81). The message type checking unit 21 regards a message to write as SMS message when the entered data is composed of numeric digits, and as mail message when the entered data includes the symbol of ‘@’ indicative of a mail account (S82). The identified message type by the message type checking unit 21 is notified to the controlling unit 26.</i> <i>After the user completes a message by filling in necessary information as well as a body message in fields of the message input screen (S 84, S89) he or she requests for transmission of the completed message (S85, S90). ...</i>”)

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	• <i>See also</i> [0020]-[0023], [0025], [0029], [0036], [0045], [0053], Figs. 6a-6b, 9.
[1.d] a displayer for displaying the message content and description data in the IUI; and	Maguire discloses a displayer for displaying the message content and description data (<i>e.g.</i>, “display” presents “the body of the message;” an “indication” that a message was “sent” or “received;” a “contact name;” and a “time-stamp”) in the IUI (<i>see</i> [1.b]). <u>E.g., Maguire:</u> <i>See</i> [1.pre], [1.b]-[1.c]. Maguire also discloses a “display” presenting “the body of the message” in the “interface.” Maguire [0026], [0028]. The display also presents additional information about the message that is description data, including “sent,” “received,” and “unread” indications, a “contact name,” and a message “time-stamp.” Maguire Fig. 5, [0026], [0040], claims 40-41. Indeed, the ’839 describes similar types of information as “description data.” <i>See, e.g.</i>, ’839, 4:47-61 (“description data include ... data for indicating the incoming message or the outgoing message,” “description data can be a sender/recipient name... or an icon”). Madisetti, ¶¶144–146. This not only renders obvious, but affirmatively discloses, displaying description data carried in a message. For example, Maguire teaches an “address” book to correlate “email” or “SMS” addresses (that are included in the message) with a contact name; it would have been obvious to use/display the address when there is no corresponding contact name to allow the user to identify the message correspondent. Maguire [0012]; Madisetti, ¶147. As another example, it was well-understood that messaging protocols

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	comprise a time-stamp for the message;¹¹ it would have been obvious to use this time-stamp to present the “time-stamp” in the display. Maguire, Fig. 5, [0026], claim 40. Madiseti, ¶147. • Figs. 4-5 <pre> graph TD 100[Receive a communications event Phone Call E-mail SMS] --> 106[Add Communications Event to Database] 106 --> 102[Identify Correspondent Call display (SS7) e-mail header SMS message] 102 --> 104[Retrieve and Display Communications Event History of Correspondent from Database] 104 --> 108[Display Communications Event Handling Options Ignore / Answer Read / Exit] 108 --> 110[Update Database to Reflect Communications Event Status] </pre> Figure 4 Figure 5 • [0012], [0028] (see [1.c]), [0026], [0040] (see [1.b]) • [0014] (“In an embodiment of the second aspect of the present invention, <i>the communications event handler includes a communications event type identifier for identifying the type of the communications event</i>.... In another embodiment of the second aspect of the present invention, <i>the user interface is a display</i>, and the communications event handler includes <i>a display controller for controlling the display to display the retrieved communication event history</i>. In another

¹¹ See *supra* note 8.

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	embodiment of the present invention, communications event handler includes a correspondent identifier for identifying the correspondent of an incoming communications event,... and includes <i>header parsing means for parsing the header of one of a received email message and a received SMS message to extract an originating address, and includes means for identifying the correspondent of an incoming communications event based on the extracted originating address.... In yet another embodiment of the second aspect of the present invention, the communications event handler includes a user interface controller for controlling the user interface to provide a user with communications event handling options</i> and also includes means for updating the communications event database to reflect the status of an incoming call.”) • [0021] (“Figure 3 illustrates an exemplary method of the present invention. ... Preferably, <i>as a part of receiving the communications event in step 100, the mobile device identifies the communications event as one of a set of known communications event types</i> including a phone call, an e-mail message and an SMS message, among other known types of communications events. <i>Upon receipt of the communications event, the mobile device identifies the correspondent in the communications event in step 102. The identification of the correspondent is preferably carried out using call display ... through an analysis of an e-mail header if the communications event is an e-mail message or through parsing the header information in a SMS message....</i> Upon retrieval of the communications event history from the database, <i>the mobile device displays the communications event history to the user. Preferably, the displaying of the information to the user allows the</i>

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	<i>user to view prior SMS and e-mail messages to determine the context of a received message.</i> Additionally, the user is preferably able to <i>view a listing of all sent and received calls involving the correspondent along with the time and date at which the call occurred....</i> In a presently preferred embodiment of the present method of the invention, <i>the mobile device displays a summary of communications events with the correspondent that both originated from, and were received by the mobile device. It is, however, fully contemplated that in certain embodiments the user is presented with only incoming, or outgoing communications events in the summary. It is preferable that the user be provided with an option to view incoming and outgoing messages on a single display, only incoming messages, or only outgoing communications events.”)</i> • [0036] (“The database 112 preferably tracks the type 132 of communications event, the data 134 contained in the communications event, and preferably a status 130 of the event. <i>The type of the event 132 typically denotes whether it was a telephone call, a SMS message, an e-mail message, a WAP data transmission, or other data based transaction.... The query to the database 116 using the incoming number or address, as a search perimeter will result in a query response containing a list of all communications events between the mobile device 112 or any account associated with mobile device 112, and the incoming address. This information is then presented to the user on the display 120 of the mobile device</i> so that prior to answering a telephone call the user will know the date of the last communication. Alternatively, if a received SMS message is generating the notification, <i>the user is provided with the context of the SMS message as a</i>

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	<i>result of being able to view prior SMS messages, prior e-mail messages, and is also presented with the dates of the last call initiated to the SMS originating address.”)</i> • Claim 40 (“<i>each stored communication event comprises a time-stamp</i>”) • See also Figs. 1, 6, [0006], [0037], Claim 41. To the extent further disclosure is required, Kang discloses displaying description data (<i>e.g.</i>, “title,” “e-mail address,” “telephone subscriber number,” “icons”) in the IUI (<i>e.g.</i>, in “LCD 11”). <u>E.g., Kang:</u> <i>See [1.c].</i> In addition to Maguire’s teachings of description data, Kang further discloses displaying, in “a single window on the wide LCD 11,” the “e-mail address” or phone “number” for a message correspondent. Kang, [0033]-[0034]. For example, messages from unnamed senders are displayed with the sender’s address or number that was contained within the message—<i>e.g.</i>, 017-7298778 in Fig. 4. Kang Fig. 4, [0034]. <i>See also</i> Madisetti, ¶¶148–150. A POSITA would have been motivated to modify Maguire with Kang’s teachings of, <i>e.g.</i>, displaying a sending/receiving party’s address or number, to advantageously improve a user’s ability to understand the context of a set of communications with a correspondent, whose name is not in Maguire’s address book, yielding an interface that displays correspondent addresses and numbers for message content. <i>See</i> Maguire [0012]. Madisetti, ¶150.

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• Figs. 2, 4

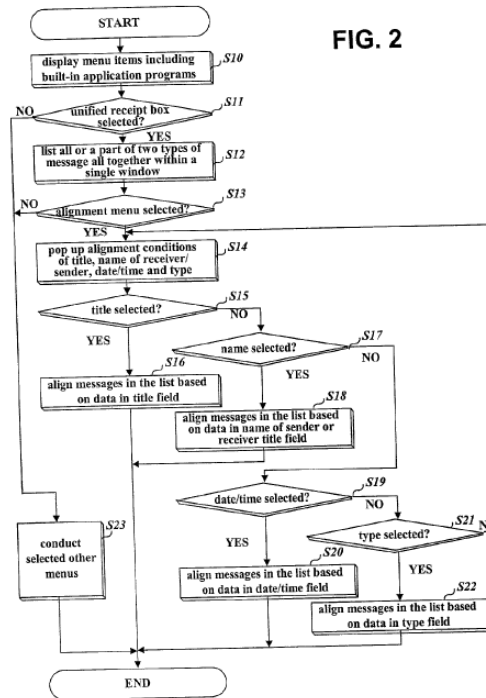
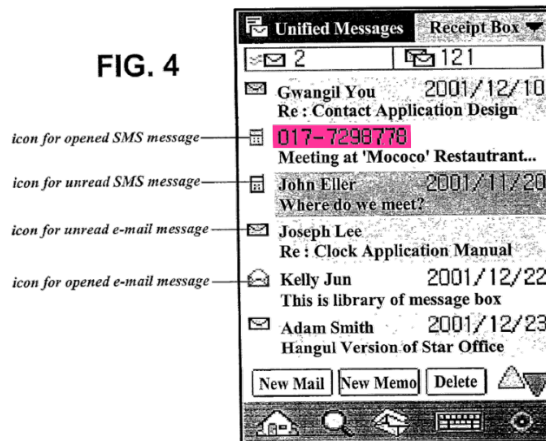


FIG. 4



- [0026] (see [1.c])
- [0027] ("FIG. 2 is a flow chart of an embodiment of *displaying received messages all together regardless of their types* of a personal information terminal in

'839	WO 2003/056789 (“Maguire”) in view of US 2002/0152220 (“Kang”)
	accordance with a unified message management method of the present invention. ...”) • [0033]-[0034] (“The controlling unit 26 sequentially reads all entries of the UMMT 41, configured as above, stored in the storage module 40, <i>and lists all or a part of them within a single window on the wide LCD 11, as shown in FIG. 4 (S12)</i>.... Specific fields are expressed differently based on message type. For example, <i>information written in ‘sender’ field is expressed in the form of e-mail address when the message type is mail, and in the form of telephone subscriber number when the type is SMS.</i>”) • [0035] (“[C]ontrolling unit 26 may <i>insert different icons</i> ... determined based on the information written in ‘Type/Opened’ field ... in the message list as shown in FIG. 4”). • <i>See also</i> [0009]-[0010], [0015], [0017]-[0018], [0027], [0031], Fig. 5.
[1.e(i)] a controller for providing the IUI to the keypad and the displayer by operating the integrated messaging service program,	Maguire renders obvious a controller for providing the IUI to the keypad (see [1.c]) and the displayer (see [1.d]) by operating the integrated messaging service program (e.g., “processor” executes “software interface module” to generate the “interface” including the display and receiving content for “outgoing communications events”). <u>E.g., Maguire:</u> <i>See</i> [1.pre], [1.b]-[1.d]. As explained for [1.b]-[1.d], Maguire’s “processor,” which is a controller, provides the IUI by executing the “software interface module” and accessing communication events from a “database” to generate the “interface” for display and

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	receive content for “outgoing communications events.” Maguire, [0019]-[0020], [0025]-[0026], [0040]. Madisetti, ¶¶151–153. Further, it would have been obvious to use a keypad to receive those events as discussed in [1.c]. Madisetti, ¶153. • Figs. 3, 5 <pre> graph TD 100[Receive a communications event Communications event identified as one of: Phone Call E-mail SMS] --> 102[Identify Correspondent Call display (SS7) e-mail header SMS message] 102 --> 104[Retrieve and Display Communications Event History of Correspondent from Database] </pre> Mobile Device 112 The diagram shows a database (116) with a table structure (128) containing columns for STATUS, TYPE, DATA, and INDEX. The database is connected to a TX/RX (118) and a PROCESSOR (122). The PROCESSOR is also connected to a COMMUNICATION EVENT SOFTWARE INTERFACE MODULE (126). Below the processor, a display (124) shows a list of events with details such as time, date, and event type (e-mail, SMS, WAP, call). Figure 3 Figure 5 • [0014], [0021] (<i>see</i> [1.d]), [0019]-[0020] (<i>see</i> [1.pre]), [0025] (<i>see</i> [1.a]), [0026], [0040] (<i>see</i> [1.b]) • <i>See also</i> [0015], [0028]-[0029]. To the extent further disclosure is required, Kang discloses providing the IUI to the keypad (<i>see</i> [1.c]), an interface to the keypad and displayer are provided in order to input outgoing messages). <u>E.g., Kang:</u> <i>See</i> [1.c]. As explained for [1.c], Kang discloses a keyboard and menu items in the display used for inputting message information.

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Kang [0025]-[0026], [0028], [0040], [0059]-[0060], Fig. 7. This provides the IUI to the keypad both by presenting the keypad as a virtual keypad in the IUI, and by providing software instructions that allow the keypad to receive message content and control message inputs within the IUI. *See id.* As further explained for [1.c], a POSITA would have been motivated to apply **Kang's** keypad teachings to **Maguire** to provide the IUI to the keypad, rendering obvious this element. *Id.*; *see* [1.c]. Madisetti, ¶¶154–155.

• **Figs. 1, 7-8**

FIG. 1

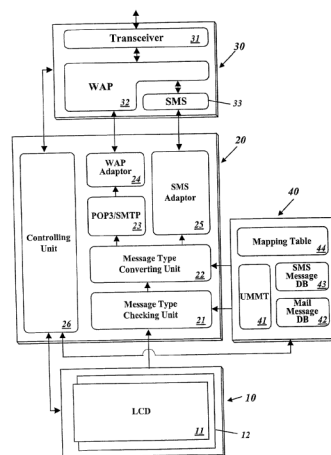


FIG. 7

FIG. 8

'839	WO 2003/056789 (“Maguire”) in view of US 2002/0152220 (“Kang”)
	• [0025] (“<i>The personal information terminal of FIG. 1 comprises an I/O module 10 for inputting/outputting data....</i>”) • [0026], [0028], [0040], [0059]-[0060] (<i>see</i> [1.c]) • <i>See also</i> Figs. 2, 9, [0023], [0027], [0029], [0033], [0035]-[0036], [0045].
[1.e(ii)] determining a message kind of the message to be transmitted which is inputted in the IUI,	Maguire renders obvious determining a message kind of the message to be transmitted (<i>e.g.</i>, “identif[ying],” <i>e.g.</i>, “voice,” “e-mail,” “SMS,” or “WAP” “event type[s]” for “outgoing communications events”; “software interface module” includes “a communications event type identifier”) which is inputted in the IUI (<i>e.g.</i>, message inputted on “display”). <u>E.g., Maguire:</u> <i>See</i> [1.pre]-[1.b], [1.e(i)]. Maguire also discloses using an “event type identifier” to determine whether an “outgoing communications event” is, <i>e.g.</i>, an “e-mail,” SMS, MMS, or WAP message. Maguire, [0002]-[0004], [0012]-[0014], [0019]-[0020], [0022]. The “identified type is stored in type field 132,” along with an indicator of “whether the communications event originated from, or was received by mobile device 112.” Maguire, [0021], [0026], [0029]-[0030]; Madisetti, ¶¶156–158. This renders obvious determining the “type” for “outgoing” messages to be transmitted to both generate the “type” information for the outgoing message stored in the database, and to ensure that the proper protocol is used to transmit the outgoing messages. <i>See id.</i> Madisetti, ¶158.

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• Figs. 3-5

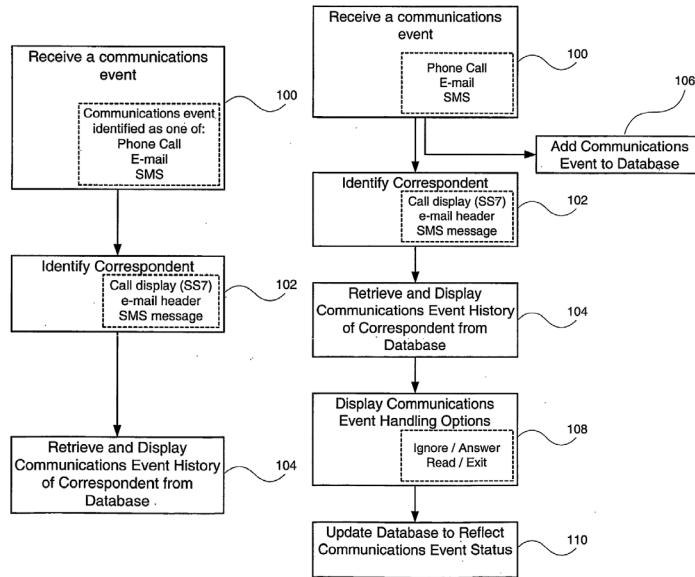


Figure 3

Figure 4

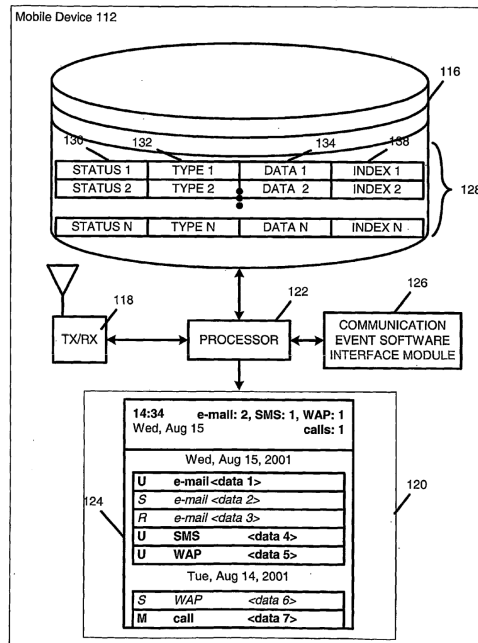
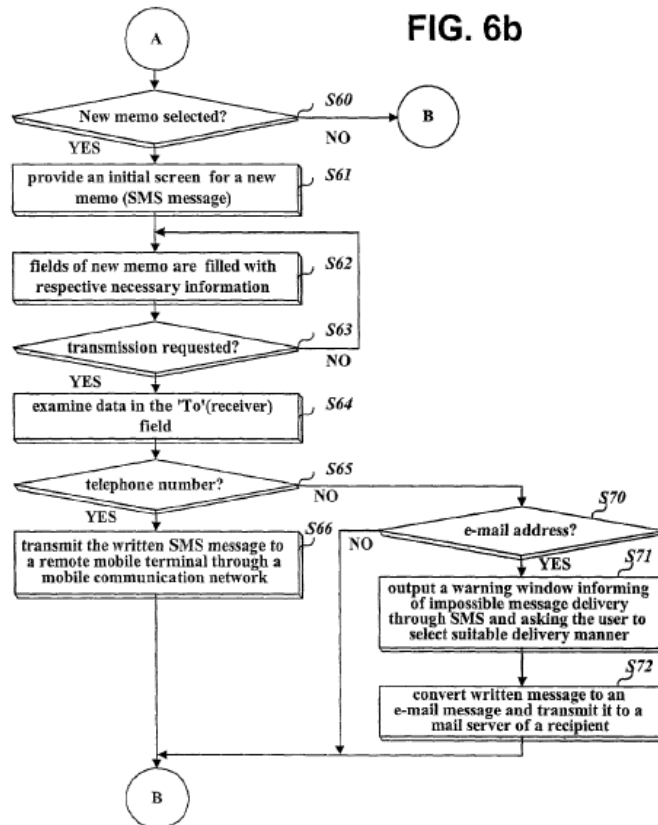
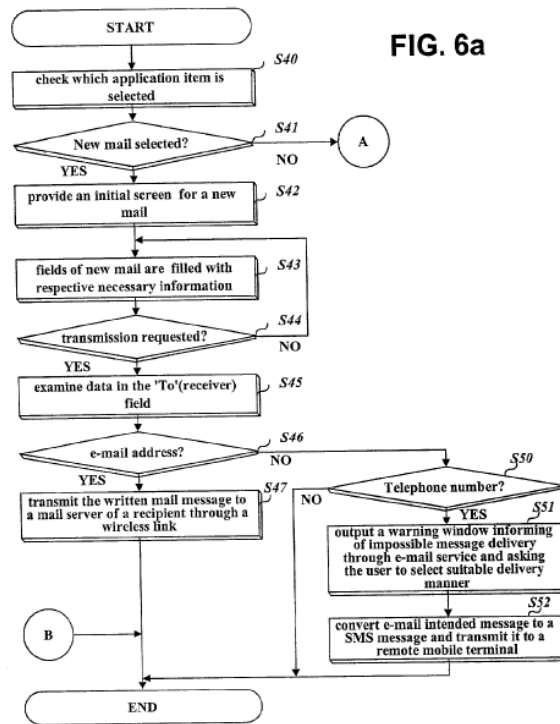


Figure 5

'839	WO 2003/056789 (“Maguire”) in view of US 2002/0152220 (“Kang”)
	• [0002]-[0004], [0019]-[0020] (<i>see</i> [1.pre]), [0012] (<i>see</i> [1.c]), [0013], (<i>see</i> [1.a]), [0014], [0021] (<i>see</i> [1.d]), [0026], [0029]-[0030] (<i>see</i> [1.b]) • [0022] (“... Typically, upon receiving a communications event in step 100, the mobile device analyses the incoming event and determines its specific type. This determination of the communications event type can be performed in numerous ways understood by those skilled in the art. <i>One such method involves determining the communications event type based on the channel over which the communications event was received. ... After narrowing the selection to the two choices based on the communications channel, the mobile device can parse the header associated with the incoming communications event to determine its specific type....</i>”) • <i>See also</i> [0035]-[0036]. To the extent further disclosure is required, Kang discloses determining a message kind of the message to be transmitted which is inputted in the IUI (e.g., “message type checking unit” examines “entered data” to determine a “message type” for the message to be transmitted). <u>E.g., Kang:</u> Kang discloses examining “entered data” using a “message type checking unit” to determine a “message type.” Kang, [0059]. For example, the system determines whether to send a message as SMS or e-mail depending on message length or the format of the number or address for the recipient. Kang, Fig. 7; [0040], [0042], [0046], [0050], [0059], [0061]. Madisetti, ¶¶159–161.

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	As discussed in §IX.B.3, a POSITA would have been motivated to modify Maguire with Kang’s teachings of checking a message type to automatically determine the type of an outgoing message, advantageously streamlining a user’s ability to generate messages without selecting between different “message input screen[s]” for different types of messages. Kang, [0061]. Madisetti, ¶161. • Figs. 1, 6a, 6b, 7, 9-10 FIG. 1



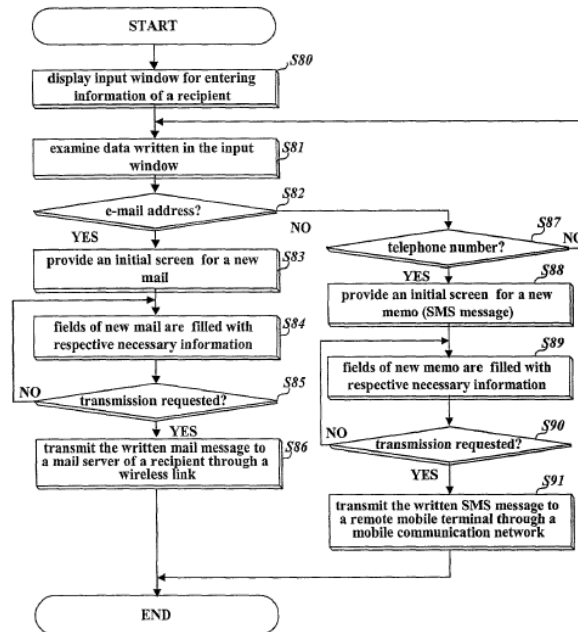
'839

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FIG. 7

FIG. 9

FIG. 10



- [0012] ("[T]he present invention is characterized in that it comprises the steps of *checking whether or not a written message, of which type is intended to belong to one type among the plural types, satisfies conditions specified by said one type; converting the written message to other type different from said one type if at*

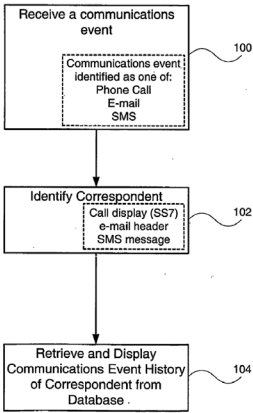
'839	WO 2003/056789 (“Maguire”) in view of US 2002/0152220 (“Kang”)
	<i>least one condition is not satisfied; and transmitting the type-converted message.”)</i> • [0040], [0059] (<i>see</i> [1.c]) • [0041]-[0042] (“When the user requests for transmission of the completed mail 10 message (S44), <i>the controlling unit 26 commands the message type checking unit 21 to verify the completed message....</i> If the data written in the ‘To’ field is composed of numeric digits not including the symbol of ‘@’ (SSO), <i>the message type checking unit 21 informs the controlling unit 26 of the fact.</i> Then, the controlling unit 26 pops up a warning window 710 ... and asks the user to <i>change delivery manner of the completed mail message (S51)</i>, as shown in FIG. 7.”) • [0046] (“If the user requests for transmission of a written memo (S 63) after filling in each field in an input screen of FIG. 8 with respective necessary information (S62), <i>the message type checking unit 21 examines the data written in the ‘To’ field (S64) as explained above.</i> If the data written in the ‘To’ field includes only numeric digits (S65), the completed memo is delivered to the SMS format adapting unit 25 which transmits it to a remote side (S66) after formatting to a SMS message.”) • [0050] (“<i>The message type checking unit 21 further counts alphanumeric characters written in the message input window 801 of FIG. 8,</i> even though the ‘To’ field is filled in with proper numeric data, and informs the counted size of the memo to the controlling unit 26. Then, <i>the controlling unit 26 checks whether the informed size is beyond the maximum size, e.g., 50 bytes allowed in a single SMS message. If below the</i>

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	<i>maximum size, the controlling unit 26 makes the written memo be sent in the form of SMS message.”)</i> • See also [0011], [0061].
[1.e(iii)] generating an outgoing message including identification data corresponding to the message kind,	Maguire discloses generating an outgoing message (e.g., “mobile device” sends “outgoing communications events” including “outgoing messages”) including identification data corresponding to the message kind (e.g., “header information” and communications “channel” for message provide “identification of the different types of communication events”). <u>E.g., Maguire:</u> See [1.pre], [1.e(i)]-[1.e(ii)]. As explained above for [1.e(ii)], Maguire discloses that a message “header” includes “information” “provid[ing] identification of the different types of communications event[s]” in order to “differentiat[e] between” e.g., “WAP” and “email” message kinds. Maguire, [0022]. Each “outgoing message[]” contains information specifying message type corresponding to the message kind. Maguire [0002]-[0004], [0019]-[0021], [0022], [0025]-[0026]. Madisetti, ¶¶162–164. • Fig. 5 Figure 5

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	• [0002]-[0004], [0019]-[0020] (<i>see</i> [1.pre]), [0012] (<i>see</i> [1.c]), [0021] (<i>see</i> [1.d]), [0022] (<i>see</i> [1.e(ii)]), [0025] (<i>see</i> [1.a]), [0026], [0029]-[0030] (<i>see</i> [1.b])
[1.e(iv)] transmitting the outgoing message,	Maguire discloses transmitting the outgoing message (<i>e.g.</i>, “transmit[ing]” “communications events” including “outgoing messages”). <u>E.g., Maguire:</u> <i>See</i> [1.pre], [1.e(i)], [1.e(iii)]. Maguire discloses “transmitt[ing]” “outgoing messages.” Maguire [0013], [0018], [0021]. Madisetti, ¶¶165–167. • [0002]-[0004] (<i>see</i> [1.pre]), [0013] (<i>see</i> [1.a]), [0021] (<i>see</i> [1.d]), [0026] (<i>see</i> [1.b]) • [0018] (“...By tracking received and <i>transmitted communications events</i>, a mobile device can provide a user with the context of the communication with any party.”) • <i>See also</i> Figs. 5, 6, [0025], [0027].
[1.e(v)] displaying the message content and the description data of the outgoing message in the IUI,	Maguire discloses and alternatively renders obvious alone, or in view of Kang, displaying the message content and the description data of the outgoing message in the IUI (<i>see</i> [1.d]; message content and description data is shown for outgoing messages (<i>see</i> [1.e(iii)])). <u>E.g., Maguire (and Kang):</u> <i>See</i> [1.pre], [1.b]-[1.d], [1.e(i)], [1.e(iii)]. As discussed in [1.d], Maguire discloses and Maguire renders obvious alone and in view of Kang displaying description data for messages; because sent and received messages are both displayed, this includes the [1.e.(iii)]

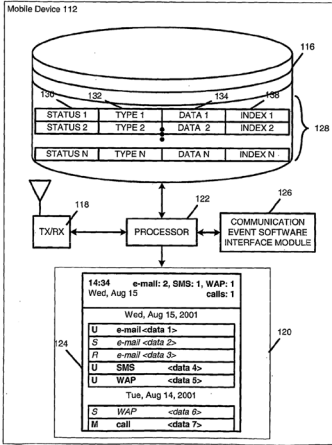
'839	WO 2003/056789 (“Maguire”) in view of US 2002/0152220 (“Kang”)
	outgoing messages. Madisetti, ¶¶168–170. This not only renders obvious, but affirmatively discloses, displaying description data for outgoing messages because address/number information for unnamed contacts and time-stamp information is displayed for outgoing email and SMS messages. That same information is contained in such SMS and email messages. <i>See</i> Maguire Fig. 5, [0012], [0026], [0029]-[0030]; Kang, Fig. 4. Madisetti, ¶170; [1.d]. ¹²
[1.e(vi)] determining a message kind of a received message,	Maguire discloses determining a message kind of a received message (<i>e.g.</i>, “upon receiving a communications event ... the mobile device analyses the incoming event and determines its specific type,” “event type”). <u>E.g., Maguire:</u> <i>See</i> [1.pre], [1.e(i)]. As discussed for [1.e(iii)], Maguire further discloses determining the “event type” corresponding to message kind of a received message using header data. Maguire, [0012], [0021]-[0022]. Madisetti, ¶¶171–173.

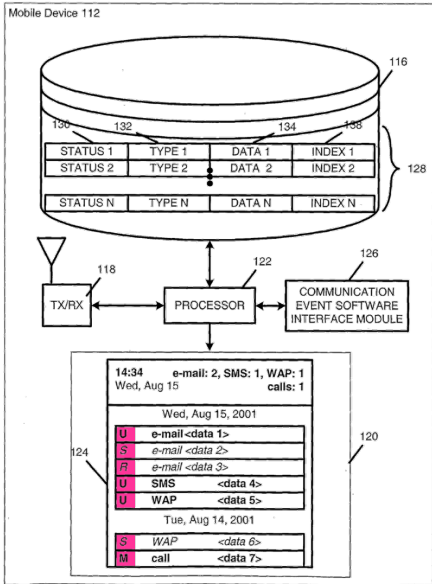
¹² *See supra* note 8.

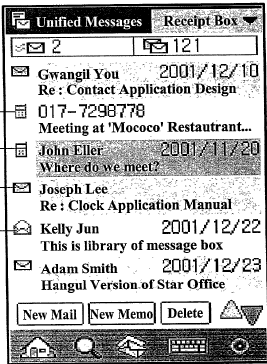
'839	WO 2003/056789 (“Maguire”) in view of US 2002/0152220 (“Kang”)
	• Fig. 3  Figure 3 • [0012] (<i>see</i> [1.c]), [0021], [0036] (<i>see</i> [1.d]), [0022] (<i>see</i> [1.e(ii)]), [0026] (<i>see</i> [1.b]) • <i>See also</i> Fig. 4, [0004], [0030], [0035].
[1.e(vii)] dividing the received message into a message content and description data,	Maguire discloses dividing the received message into a message content and description data (<i>e.g.</i>, message content and description data are divided into different “data fields” (<i>see</i> [1.c]-[1.d]); description data is “extracted” from message headers). <u>E.g., Maguire:</u> <i>See</i> [1.pre], [1.c]-[1.e(i)], [1.e(vi)]. Maguire discloses this limitation at least two ways. First, content and description data of a message are stored in separate “data fields,” and therefore divided, in a database: the message “body” or content is stored in a “data” field; the displayed “indication” that a message is “sent” “received” or “unread” is stored in a “type” field; and the “index” and “type” fields together with an “address book,” are used to associate messages with a particular “correspondent.”

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	Maguire [0014], [0026], claim 21. The “index” field stores information used to “easily identify and find a record related to a specific call” and “indexing data” being “time-stamps”—which not only renders obvious, but affirmatively discloses, storing in the “index” the “time-stamp” and “address” information for a message. Maguire [0026], claims 40-41, 54. Madisetti, ¶¶174–176. Second, as discussed in [1.d], Maguire further discloses extracting the displayed email address or SMS address information from headers of received messages. Maguire [0012]. This not only renders obvious, but affirmatively discloses, dividing the message into message content and description data to separately display this information. <i>See</i> Maguire Fig. 5, [0012], [0014], [0026], claim 21. Madisetti, ¶177. Fig. 5 [0012] (<i>see</i> [1.c]), [0014], [0021] (<i>see</i> [1.d]), [0026] (<i>see</i> [1.b]) Claim 21 (“The mobile device of claim 18, wherein the correspondent identifier includes <i>header parsing means for parsing the header of one of a received email message and a received SMS message to extract an originating address, and includes means for identifying</i>

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	<i>the correspondent of an incoming communications event based on the extracted originating address.”)</i> • Claim 54 (“...<i>the indexing data for each stored communication event are time-stamps.</i>”) • <i>See also</i> Fig. 3, [0020]. To the extent additional disclosure of “description data” is required, Kang further discloses description data (<i>see</i> [1.d])). <u>E.g., Kang:</u> <i>See</i> [1.d]. Modifying Maguire with Kang’s teachings as discussed in [1.d], it would have been obvious to divide the message into content and description data by displaying the address/number description data separate from the message body. <i>See</i> Kang, [0033]-[0034], Fig. 4. Madisetti, ¶¶178–179.
[1.e(viii)] displaying the message content and the description data in the IUI,	Maguire discloses and alternatively renders obvious alone or in view of Kang displaying the message content and the description data in the IUI (<i>see</i> [1.d]; message content and description data is shown for received messages (<i>see</i> [1.e(vii)])). <u>E.g., Maguire:</u> <i>See</i> [1.pre], [1.b]-[1.d], [1.e(iii)]-[1.e(v)], [1.e(vii)] As explained for [1.d] and [1.e(vii)], Maguire discloses and renders obvious alone or in view of Kang displaying the body of the received message along with description data, in the display. <i>E.g.</i>, Maguire Fig. 5, [0021], [0026], [0028], [0036], [0040], claims 40-41. Madisetti, ¶¶180–182.

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[1.e(ix)] and controlling elements in the wireless communication terminal.	Maguire discloses controlling elements in the wireless communication terminal (e.g., “processor...interacts with display...upon receipt of a communications event and after querying database”; executes software from “software interface module”). <u>E.g., Maguire:</u> See [1.pre]-[1.e(viii)]. Maguire also discloses that the “processor” that uses the “database” and a “software interface module” to control the user interface (see [1.b]) also controls the device’s “display” (see [1.d]). Maguire [0025]-[0026]. Madisetti, ¶¶183–185. • Fig. 5  Figure 5 • [0025] (see [1.a]), [0026], [0029]-[0030] (see [1.b]) • See also Fig. 3, [0014]-[0015], [0040], claims 17, 23.
[2] The wireless communication terminal as recited in claim 1, wherein the description data	See [1]. Maguire further discloses wherein the description data (see [1.d], [1.e(v)], [1.e(vii)]) include incoming/outgoing description data in order to present whether the message

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include incoming/outgoing description data in order to present whether the message is transmitted or received.	is transmitted or received (<i>e.g.</i>, an “indication” that a message was “sent” or “received,” and a “contact name”). <u>E.g., Maguire:</u> <i>See</i> [1]; [1.pre]-[1.a], [1.d], [1.e.(v)], [1.e(vii)]. As discussed in [1.d], Maguire displays “indication[s]” that a message is “sent” (“S”), “received” (“R”), or “unread” (“U”), and a “contact name” for the message correspondent; these indications and contact name specify whether the message was sent to or received by the recipient. Maguire Fig. 5, [0026], [0040]. Madisetti, ¶¶186–188. Moreover, as discussed in §IX.B.3, it would have been obvious to include the telephone number or email address from sender/recipient information of the message in place of the “contact name” for unnamed contacts. Madisetti, ¶188. • Fig. 5  Figure 5 • [0021] (<i>see</i> [1.d]), [0026], [0040] (<i>see</i> [1.b]), [0036] (<i>see</i> [1.d])

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	• <i>See also</i> Figs. 1, 6, [0020], [0037]. To the extent further disclosure is required, Kang discloses the description data (see [1.d], [1.e.(v)], [1.e(vii)]) includes incoming/outgoing description data in order to present whether the message is transmitted or received (e.g., “e-mail address,” “telephone subscriber number”). <u>E.g., Kang:</u> <i>See</i> [1.d], [1.e.(v)], [1.e(vii)]. As discussed in [1.d], Maguire in view of Kang further renders obvious that an “e-mail address,” or “telephone subscriber number” are displayed in the interface for unnamed correspondents—e.g., the number “017-7298778” in Fig. 4. Maguire ¶[0034]; Madisetti, ¶¶189–190. • Fig. 4 FIG. 4 icon for opened SMS message icon for unread SMS message icon for unread e-mail message icon for opened e-mail message  • [0033]-[0034] (<i>see</i> [1.d])

C. Grounds 3/4: Grounds 1-2 in further view of RFC2822 (Claims 1-2)

As set forth for Grounds 1 and 2, **Lemay** and **Maguire** disclose messages—e.g., emails—include associated description data that is displayed to the user. *See,*

e.g., §§IX.A–B. To the extent PO argues further disclosure is required of the “description data” recited in [1.d], [1.e(v)], [1.e(vii)], [1.e(viii)], and [2] included in transmitted messages, **RFC2822** discloses including message description data (*e.g.*, “[a]ddresses” in “header fields,” and “date and time” information) as part of the transmitted message. *See* RFC2822, 14-16, 20-22, 41. Madisetti, ¶191.

RFC2822 teaches a standardized format for messages carrying “electronic mail.” RFC2822, 1. Messages contain “header fields” with associated “[a]ddresses,” “date and time” information. RFC2822, 14-16, 41. Addresses include a “display name,” and “indicate senders and recipients of messages” in “from,” “to,” and “cc” fields of the message. RFC2822, 15-16, 21-22, 41. The “date and time” is specified in the “origination date field.” RFC2822, 14-15, 18, 20-21. Madisetti, ¶192.

Like **Lemay**, **Maguire**, and **Kang**, **RFC2822** is analogous prior art and in the same field as the ’839, and **RFC2822** is reasonably pertinent to the alleged problems identified in the ’839 of implementing messaging systems using existing transmission protocols. *See* §§IX.A–IX.B; ’839, 1:8-15; RFC2822, 1. Madisetti, ¶193.

While **Lemay** and **Maguire** disclose displaying description data for sent and received messages, they leave it to a POSITA how to derive such information. **RFC2822** provides additional details disclosing that such information is part of the transmitted message. RFC2822, 14-16, 18-29. *See* §§IX.A–IX.B. A POSITA

would have been motivated to modify **Lemay** or **Maguire (in view of Kang)** by applying **RFC2822**'s message protocol teachings of including name and time-stamp description data in messages to ensure that accurate contextual information about messages is presented to users, yielding a system in which **Lemay**'s interface, or **Maguire**'s "unified view" of communications events, displays additional contextual information, *e.g.*, address information and display names, extracted from each email message. Lemay, 5:16-55; Maguire, [0020]; RFC2822, 15-16, 21-22. Madisetti, ¶¶193–194.

A POSITA would have had a reasonable expectation of success in modifying **Lemay** or **Maguire**'s teachings to make use of description data included in email messages, as disclosed by **RFC2822** because proposed internet standard protocols were well-known in the art and developed for interoperability with a variety of communication devices. Madisetti, ¶195; *see also* Schmidt (Ex. 1025), [0062]; Smith (Ex. 1026), Fig. 12; Ex. 1019, 31; Ex. 1020, 30-31; Ex. 1021, 23; Ex. 1022, 1.

X. SECONDARY CONSIDERATIONS

There is no evidence in the prosecution history of the '839 or any related application that any arguments regarding secondary considerations exist, let alone that any such evidence could overcome the strong showing of obviousness above or that there is a sufficient nexus to any of the Claims. *See generally* '839FH; Madisetti, ¶196. Indeed, as demonstrated by the prior art referenced herein, any

purported solutions to problems or unexpected results in the '839 were already well known. Madisetti ¶196. To the extent PO asserts the existence of any secondary considerations in its responses, Petitioner reserves the right to address any such evidence.

XI. CONCLUSION

Substantial, new, and noncumulative technical teachings have been presented for the '839's Claims, which are anticipated or rendered obvious for the reasons set forth above. Madisetti, ¶¶197–201. There is a reasonable likelihood that Petitioner will prevail as to claims 1-2. *Inter partes* review of these Claims is accordingly requested.

Dated: August 11, 2023

Respectfully submitted,

/James L. Davis, Jr./

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Reg. No. 57,325

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CERTIFICATE OF COMPLIANCE

Pursuant to 37 CFR §42.24(a) and (d), the undersigned hereby certifies that this Petition for Inter Partes Review complies with the type-volume limitation of 37 CFR §42.24(a)(i) because, exclusive of the exempted portions, it contains 13,989 words as counted by the word processing program used to prepare the paper.

Dated: August 11, 2023

/Abed R. Balbaky/

Abed R. Balbaky

Reg. No. 76,154

CERTIFICATE OF SERVICE

The undersigned certifies service pursuant to 37 C.F.R. §§42.6(e) and 42.105(b) on the Patent Owners by Priority Mail Express of a copy of this Petition for *Inter Partes* Review and supporting materials at the correspondence address of record for the '839 patent:

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