

## Petitioner's Demonstratives

*Samsung Elecs. Am., Inc. v. Uniloc 2017 LLC*

**IPR2017-01797 (U.S. Patent No. 8,724,622)**

**IPR2017-01798 (U.S. Patent No. 8,724,622)**

**IPR2017-01799 (U.S. Patent No. 8,199,747)**

**IPR2017-01800 (U.S. Patent No. 8,243,723)**

**IPR2017-01801 (U.S. Patent No. 8,995,433)**

**IPR2017-01802 (U.S. Patent No. 7,535,890)**

**Oral Hearing: October 30, 2018**

## IPR2017-01797 – Instituted Grounds

- Claims 3, 4, 6-8, 10, 11, 13, 18, 21-23, 27, 32, 34, 35, 38, and 39 as obvious over *Griffin* and *Zydney*;
- Claim 12 as obvious over *Griffin*, *Zydney*, and *Aravamudan*; and
- Claim 11 as obvious over *Griffin*, *Zydney*, and *Vuori*.

## IPR2017-01798 – Instituted Grounds

- Claims 14-17 and 28-31 as obvious over *Griffin*, *Zydney*, and *Clark*;
- Claims 19 and 33 as obvious over *Griffin*, *Zydney*, and *Väänänen*; and
- Claims 24-26 as obvious over *Griffin*, *Zydney*, and *Low*.

## IPR2017-01799 – Instituted Grounds

- Claims 1-3, 12 and 13 as obvious over *Griffin* and *Zydney*.

IPR2017-01799, Dec. (Paper 9) at 35-36  
IPR2017-01799, Order (Paper 16) at 3

## IPR2017-01800 – Instituted Grounds

- Claims 1-3 as obvious over *Griffin* and *Zydney*.

IPR2017-01800, Dec. (Paper 8) at 24  
IPR2017-01800, Order (Paper 12) at 3

## IPR2017-01801 – Instituted Grounds

- Claims 1-3 and 8 as obvious over *Griffin* and *Clark*;
- Claims 4 and 7 as obvious over *Griffin*, *Clark*, and *Zydney*;
- Claim 5 as obvious over *Griffin*, *Clark*, and *Väänänen*;
- Claims 9, 11, 14-17, 25, and 26 as obvious over *Griffin* and *Zydney*;
- Claim 12 as obvious over *Griffin*, *Zydney*, and *Väänänen*;
- Claim 10 as obvious over *Griffin*, *Zydney*, and *Lee*; and
- Claim 26 as obvious over *Griffin*, *Zydney*, and *Vuori*.

## IPR2017-01802 – Instituted Grounds

- Claims 1, 3-6, 9 and 40-43 as obvious over *Griffin* and *Zydney*; and
- Claims 2, 14, 15, 17-20, 23, 51-54, and 57 as obvious over *Griffin*, *Zydney*, and *Malik*.

## Common Issues

- Construction of “Instant Voice Message”  
(IPR2017-01797, -01798, -01799, -01800, -01801)
- “Attaching” Limitations  
(IPR2017-01797, -01799, -01800, -01801)
- “Controlling a Method of Generating” Limitations  
(IPR2017-01799, -01800)
- “Instant Voice Message” Limitations  
(IPR2017-01799, -01800, -01801)
- “Nodes” Limitations  
(IPR2017-01799, -01800)
- “Network Interface” / “Within” Limitations  
(IPR2017-01797, -01798, -01799, -01800)
- Combining *Griffin* and *Zydney*  
(IPR2017-01797, -01798, -01802)

## Common Issues

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(IPR2017-01799, -01800, -01801)
- “Nodes” Limitations  
(IPR2017-01799, -01800)
- “Network Interface” / “Within” Limitations  
(IPR2017-01797, -01798, -01799, -01800)
- Combining *Griffin* and *Zydney*  
(IPR2017-01797, -01798, -01802)

# Construction of “Instant Voice Message”

## The '622 Patent

- 3.** A system comprising:
- a network interface connected to a packet-switched network;
  - a messaging system communicating with a plurality of instant voice message client systems via the network interface; and
  - a communication platform system maintaining connection information for each of the plurality of instant voice message client systems indicating whether there is a current connection to each of the plurality of instant voice message client systems,
- wherein the messaging system receives an instant voice message from one of the plurality of instant voice message client systems, and
- wherein the instant voice message includes an object field including a digitized audio file.

## Construction of “Instant Voice Message”

### Two primary disputes:

1. What is an instant “message”?
2. What does “instant” mean?

# Construction of “Instant Voice Message”

## 1. What is an instant voice “message”?

### Patent Owner

Including attachments (in addition to a voice message) in a voice container, however, does not disclose or suggest “attaching one or more files to the instant voice message” *itself*.  
*See EX2001 ¶¶ 50-58.*

IPR2017-01797, Resp. (Paper 12) at 21

### Mr. Easttom

The ’622 Patent repeatedly and consistently explains that the “instant voice message” is recorded in the audio file. EX1001, 8:7–11 (“In

IPR2017-01797, Easttom Decl. (Ex. 2001) at ¶ 51

IPR2017-01797, Reply (Paper 17) at 1-2

# **Construction of “Instant Voice Message”**

## **Petitioner**

As applied in the Petition, the BRI of the term “instant voice message” (IVM) is a message containing digitized speech that is capable of being transmitted in real time to a recipient device.

# Construction of “Instant Voice Message”

## The '622 Patent

- 3. A system comprising:**
- a network interface connected to a packet-switched network;
  - a messaging system communicating with a plurality of instant voice message client systems via the network interface; and
  - a communication platform system maintaining connection information for each of the plurality of instant voice message client systems indicating whether there is a current connection to each of the plurality of instant voice message client systems,
- wherein the messaging system receives an instant voice message from one of the plurality of instant voice message client systems, and
- wherein the instant voice message includes an object field including a digitized audio file.

IPR2017-01797, '622 Patent (Ex. 1001) at Claim 3

IPR2017-01797, Reply (Paper 17) at 2

# Construction of “Instant Voice Message”

## The '622 Patent

7. The system according to claim 3, wherein the instant voice message includes a source field including a unique identifier associated with at least one of a given one of the plurality of instant voice message client systems that created the instant voice message and a given one of the plurality of users using the given one of the plurality of instant voice message client systems.

8. The system according to claim 3, wherein the instant voice message includes a destination field including a unique identifier associated with at least one of a given one of the plurality of instant voice message client systems identified as a recipient of the instant voice message and a given one of the plurality of users using the given one of the plurality of instant voice message client systems.

IPR2017-01797, '622 Patent (Ex. 1001) at Claims 7, 8

IPR2017-01797, Reply (Paper 17) at 2

# Construction of “Instant Voice Message”

## The '747 Patent

1. A method for instant voice messaging over a packet-switched network, the method comprising:

generating an instant voice message, wherein generating includes recording the instant voice message in an audio file and attaching one or more files to the audio file;

transmitting the instant voice message having one or more recipients;

receiving an instant voice message when a recipient is available; and

receiving a temporarily stored instant voice message when a recipient becomes available, wherein the instant voice message is temporarily stored when at least one recipient is unavailable.

13. The method for instant voice messaging over a packet-switch network according to claim 1, further comprising:

displaying an indication that an instant voice message has been received;

separating the instant voice message into an audio file and one or more files; and

IPR2017-01799, '747 Patent (Ex. 1001) at Claims 1, 13

IPR2017-01799, Reply (Paper 24) at 2-5

# Construction of “Instant Voice Message”

## The '622 Patent

A message object comprises an action field, an ID field, a source field, a destination field, and an object field.

IPR2017-01797, '622 Patent (Ex. 1001) at 14:6-7

object. The content of the source field is a globally unique identifier (“GUID”) that uniquely identifies the sender of the message.

IPR2017-01797, '622 Patent (Ex. 1001) at 14:19-21

The content of the destination field is a GUID of an intended IVM recipient of the instant voice message. The content of the object field is a block of data being carried by the message object, which may be, for example, a digitized instant voice message.

IPR2017-01797, '622 Patent (Ex. 1001) at 14:36-40

IPR2017-01797, Reply (Paper 17) at 2-3

# Construction of “Instant Voice Message”

## Mr. Easttom

4 Yes, this does refresh my recollection.

5 Q. So after reviewing this, does the instant voice

6 message described in the '622 patent include information

7 identifying the sender?

8 A. Yes.

9 Q. Does the instant voice message also include an

10 identifier for the recipient?

11 MR. LOVELESS: Objection, form, scope.

12 A. I don't recall a specific element of the

13 patent, but it would have to or else it couldn't get to

14 the recipient.

15 Q. Okay.

16 A. And, actually, as I glance here, there is a --

17 at the top of the section you just had me read: A

18 message object comprised as an action field, an ID

19 field, a source field, a destination field, and an

20 object field.

21 The destination field would be the

22 recipient.

23 Q. You were reading from column 14, line 6 to 7?

24 A. That would be accurate.

Easttom Depo. (Ex. 1040) at 109:5-22

IPR2017-01797, Reply (Paper 17) at 3

# Construction of “Instant Voice Message”

## 1. What does “instant” mean?

### Patent Owner

This is not “instant” communication. EX2001 ¶¶ 59–60. Instant (or real-time) communication requires both instant (or real-time) transmission and instant (or real-time) receipt.

IPR2017-01797, Resp. (Paper 12) at 25

It is uncontested that *Griffin* provides no explicit or inherent disclosure of an expectation that its “speech message” is both transmitted in real time and heard on the receiving end in real time.

IPR2017-01799, Resp. (Paper 21) at 32

IPR2017-01797, Reply (Paper 17) at 4

IPR2017-01799, Reply (Paper 24) at 5

## Construction of “Instant Voice Message”

### Mr. Easttom

Petitioner argues that *Griffin* supports transmission of a voice message in real time (Pet. p. 20), but neither Petitioner nor *Griffin* describe communication of speech in real time. Real-time communication requires both the capability for transmission in real time as well as the capability for receipt in real time.

IPR2017-01797, Easttom Decl. (Ex. 2001) at ¶ 24

*Griffin* teaches a system that has no knowledge of, or interest in, and no way to know whether a recipient is positioned to hear a message.

IPR2017-01797, Easttom Decl. (Ex. 2001) at ¶ 26

IPR2017-01797, Reply (Paper 17) at 4

# **Construction of “Instant Voice Message”**

## **Petitioner**

As applied in the Petition, the BRI of the term “instant voice message” (IVM) is a message containing digitized speech that is capable of being transmitted in real time to a recipient device.

# Construction of “Instant Voice Message”

## The '622 Patent

11. The system according to claim 3, wherein, upon receipt of an instant voice message, the communication platform system determines if there is the current connection to one of the plurality of instant voice message client systems identified as a recipient of the instant voice message, and if there is no connection with the one of the plurality of instant voice message client system identified as the recipient, the instant voice message is stored and delivered when the one of the plurality of instant voice message client systems identified as the recipient re-established a connection.

IPR2017-01797, '622 Patent (Ex. 1001) at Claim 11

IPR2017-01797, Reply (Paper 17) at 4

# Construction of “Instant Voice Message”

## The '622 Patent

It should be understood that only the available IVM recipients, currently connected to the IVM server **202**, will receive the instant voice message. It is noted that if a recipient IVM client is not currently connected to the local IVM server **202** (i.e., is unavailable), the IVM server temporarily saves the instant voice message and delivers it to the IVM client when the IVM client connects to the local IVM server **202** (i.e., is available).

IPR2017-01797, '622 Patent (Ex. 1001) at 8:32-39

IPR2017-01797, Reply (Paper 17) at 4

# Construction of “Instant Voice Message”

## Mr. Easttom

7           Q. In that particular scenario, would the message  
8        that's temporarily stored on the server be an instant  
9        voice message in the context of the claims of the '622  
10      patent?

11          A. Yes, and the reason being is that I, as sender,  
12        have sent this right now. I just didn't know you  
13        weren't available. The fact -- and you might have  
14        become unavailable after I sent the message. I mean,  
15        there -- it does take a few seconds for something to  
16        traverse a network. It would be entirely possible I  
17        sent you a message while you were available, and for any  
18        number of reasons, you became unavailable in transmit.  
19        That's still an instant message. It's just you've left  
20        the conversation prematurely.

Easttom Depo. (Ex. 1040) at 97:7-20

## Common Issues

- Construction of “Instant Voice Message”  
(IPR2017-01797, -01798, -01799, -01800, -01801)
- “Attaching” Limitations  
(IPR2017-01797, -01799, -01800, -01801)
- “Controlling a Method of Generating” Limitations  
(IPR2017-01799, -01800)
- “Instant Voice Message” Limitations  
(IPR2017-01799, -01800, -01801)
- “Nodes” Limitations  
(IPR2017-01799, -01800)
- “Network Interface” / “Within” Limitations  
(IPR2017-01797, -01798, -01799, -01800)
- Combining *Griffin* and *Zydney*  
(IPR2017-01797, -01798, -01802)

# “Attaching” Limitations

## The '622 Patent

**27.** A system comprising:  
a client device;  
a network interface coupled to the client device and connecting the client device to a packet-switched network;  
and  
an instant voice messaging application installed on the client device, wherein the instant voice messaging application includes a client platform system for generating an instant voice message and a messaging system for transmitting the instant voice message over the packet-switched network via the network interface,  
wherein the instant voice messaging application includes a document handler system for attaching one or more files to the instant voice message.

## “Attaching” Limitations

### The '747 Patent

1. A method for instant voice messaging over a packet-switched network, the method comprising:  
generating an instant voice message, wherein generating includes recording the instant voice message in an audio file and attaching one or more files to the audio file;  
transmitting the instant voice message having one or more recipients;  
receiving an instant voice message when a recipient is available; and  
receiving a temporarily stored instant voice message when a recipient becomes available, wherein the instant voice message is temporarily stored when at least one recipient is unavailable.

# “Attaching” Limitations

## IPR2017-01797 – Petition

While *Griffin* describes a system for attaching files to an outbound message and explains that an outbound message may be a speech message, *Griffin* does not explicitly describe attaching files to a speech message. It would have been obvious to a POSA at the time of the alleged invention, however, to modify *Griffin's* system/process to implement such features in view of the teachings of *Griffin* and the knowledge of a POSA, because such a person would have recognized that files could be attached to text and speech messages in the same way and for the same reasons and advantages. (Ex. 1002, ¶247.)

## “Attaching” Limitations

### IPR2017-01797 – Response

Accordingly, Petitioner’s exclusive reliance on alleged teachings in *Zydney* directed to attaching one or more files *to Zydney’s voice container* (which *Zydney* expressly distinguishes from its *voice message*) does not render obvious the distinguishable limitation “a document handler system for attaching one or more files *to the instant voice message*”, as recited in independent claim 27.

IPR2017-01797, Resp. (Paper 12) at 22

### IPR2017-01799 – Response

Attaching a file to *Griffin’s message 400* is not the same as attaching a file *to any alleged audio file included in that message 400*. EX2001 ¶¶ 42–44.

The Board has already found, in multiple matters, that such a theory is unavailing because the claim language requires that one or more files be attached *to the audio file itself*, not to a distinct container. *See, e.g.*, Paper 9 at 23

IPR2017-01799, Resp. (Paper 21) at 24

## “Attaching” Limitations

### Dr. Haas

Because a speech chat message 400 includes an audio file, as I discussed above, a person of ordinary skill in the art at the time of the alleged invention would have understood that attaching a file to the message discloses attaching a file to the audio file included in the message.

IPR2017-01799, Haas Decl. (Ex. 1002) at ¶ 101

IPR2017-01799, Pet. (Paper 1) at 26  
IPR2017-01799, Reply (Paper 24) at 15-16

# “Attaching” Limitations

## Mr. Easttom

10           Q. Okay. So as long as the recipient device,  
11           whatever it may be, knows that those two documents were  
12           associated, they would be attached?

13           A. Yes.

Easttom Dep. (Ex. 1040) at 137:10-13

## “Attaching” Limitations

## Mr. Easttom

5 Q. Okay. So if you attach -- let me ask you: How  
6 would you attach a document to an audio file?  
7 A. Well, in the same --  
8 MR. LOVELESS: Object, form.  
9 THE WITNESS: Sorry. I jumped the gun.  
10 A. In the same mechanisms I just described. I  
11 could conceivably have a system, in this case a document  
12 handler and a voice messaging system that are both aware  
13 that these two files are meant to go together, without  
14 touching the files, or I could just append some little  
15 small bit of information, a few bits that says, hey, you  
16 go with this other file; they go together. Both those  
17 are acceptable. And, again, the patent doesn't include  
18 one or the other. It pretty much says, I think,  
19 conventional methods.

Easttom Dep. (Ex. 1040) at 139:10-19

# “Attaching” Limitations

## Griffin

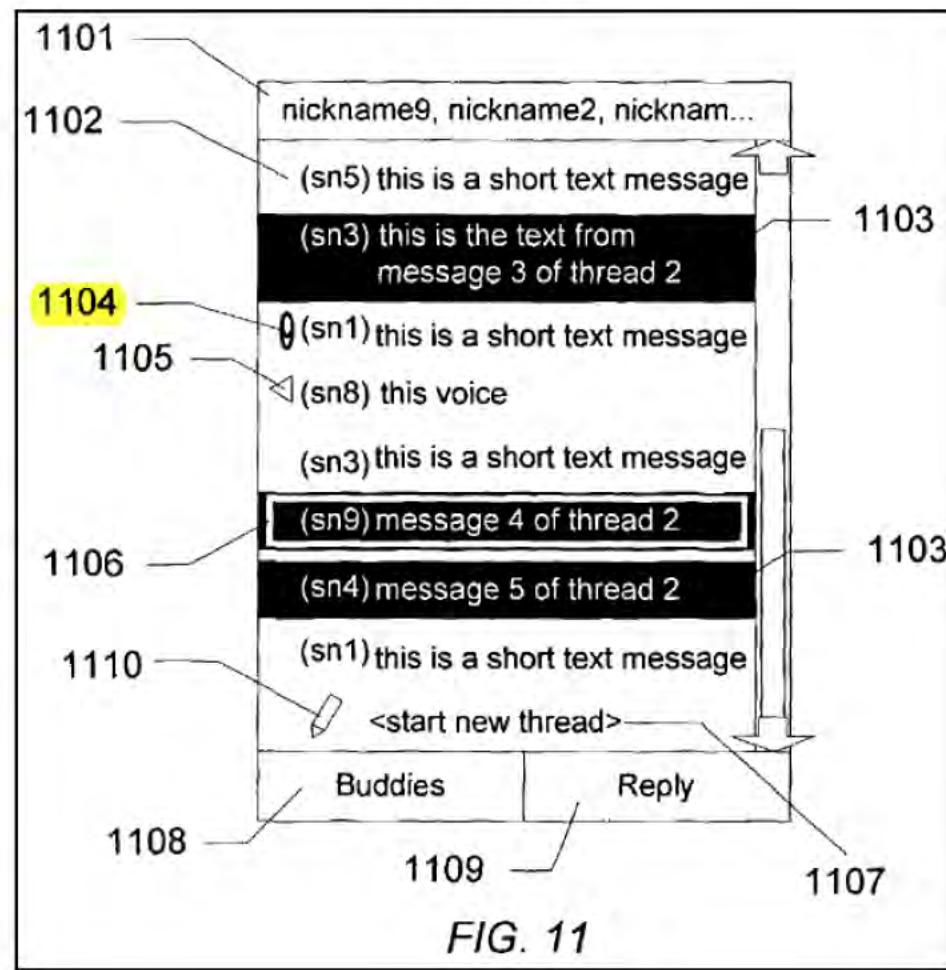


FIG. 11

Griffin (Ex. 1005) at Fig. 11

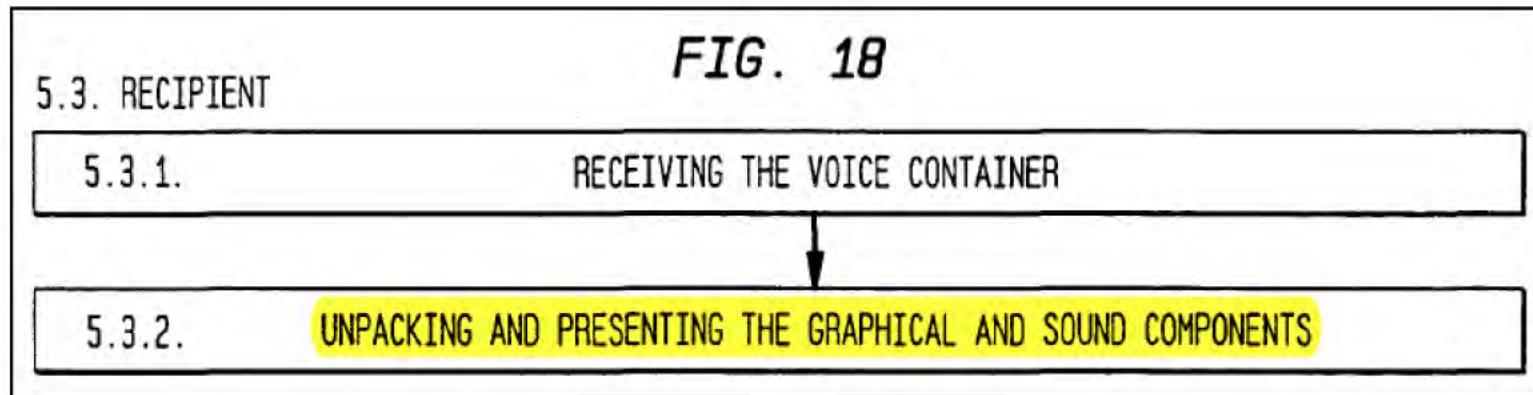
IPR2017-01799, Reply (Paper 24) at 17

# “Attaching” Limitations

## Zydney

FIG. 18 is a flow chart of an exemplary embodiment illustrating the method and system for voice exchange and voice distribution with respect to the recipient of a voice container with multimedia attachments;

Zydney (Ex. 1006) at 4:7-9



Zydney (Ex. 1006) at Fig. 18

IPR2017-01799, Pet. (Paper 1) at 27-28

IPR2017-01799, Reply (Paper 24) at 17

## Common Issues

- Construction of “Instant Voice Message”  
(IPR2017-01797, -01798, -01799, -01800, -01801)
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(IPR2017-01797, -01799, -01800, -01801)
- “Controlling a Method of Generating” Limitations  
(IPR2017-01799, -01800)
- “Instant Voice Message” Limitations  
(IPR2017-01799, -01800, -01801)
- “Nodes” Limitations  
(IPR2017-01799, -01800)
- “Network Interface” / “Within” Limitations  
(IPR2017-01797, -01798, -01799, -01800)
- Combining *Griffin* and *Zydney*  
(IPR2017-01797, -01798, -01802)

# “Controlling a Method of Generating” Limitations

## The '747 Patent

3. A method for instant voice messaging over a packet-switched network, the method comprising:  
generating an instant voice message; and  
**controlling a method of generating the instant voice message based upon a connectivity status each recipient;**  
transmitting the instant voice message having one or more recipients;  
receiving an instant voice message when a recipient is available; and  
receiving a temporarily stored instant voice message when a recipient becomes available, wherein the instant voice message is temporarily stored when at least one recipient is unavailable.

IPR2017-01799, '747 Patent (Ex. 1001) at Claim 3

## The '723 Patent

3. The method for instant voice messaging over a packet-switch network according to claim 1, further comprising the step of:  
**controlling a method of generating the instant voice message based upon the connectivity status of said one or more recipient.**

IPR2017-01799, '747 Patent (Ex. 1001) at Claim 3

# “Controlling a Method of Generating” Limitations

## The ’747 Patent

**4.** The method for instant voice messaging over a packet-switch network according to claim 3, wherein said method of generating said instant voice message is selected from a group comprising a record mode and an intercom mode.

**5.** The method for instant voice messaging over a packet-switch network according to claim 4, wherein said record mode is selected as a default when at least one recipient is unavailable.

**6.** The method for instant voice messaging over a packet-switch network according to claim 4, wherein said intercom mode is selected as a default when said one or more recipients are available.

IPR2017-01799, ’747 Patent (Ex. 1001) at Claims 4-6

IPR2017-01799, Reply (Paper 24) at 8-9

# “Controlling a Method of Generating” Limitations

## The '747 Patent

7. The method for instant voice messaging over a packet-switch network according to claim 4, wherein said record mode comprises the steps of:  
recording the instant voice message;  
generating a stop indicator; and  
transmitting the recorded instant voice message after the generation of said stop indicator.
8. The method for instant voice messaging over a packet-switch network according to claim 4, wherein said intercom mode comprises the steps of:  
buffering each of a plurality of successive portions of the instant voice as the instant message is recorded;  
transmitting from each successive buffered portion; and  
delivering each successive portion to the recipients wherein the recipients audibly playing each successive portion as it is delivered.

IPR2017-01799, '747 Patent (Ex. 1001) at Claims 7-8

IPR2017-01799, Reply (Paper 24) at 8-9

# “Controlling a Method of Generating” Limitations

## The '747 Patent

The “intercom mode” may be designated as a default mode when an IVM recipient is on-line, while the “record mode” may be designated as a default if the IVM recipient is unavailable, i.e., not on-line.

IPR2017-01799, '747 Patent (Ex. 1001) at 11:55-59

IPR2017-01799, Reply (Paper 24) at 9-10

# “Attaching” Limitations

## Mr. Easttom

10           Q. So the Claim 3 covers the configuration we  
11       discussed earlier where a client's device can generate a  
12       method -- excuse me -- a message using the record mode  
13       if the recipient is unavailable or using the intercom  
14       mode if the recipient is available?

15           MR. LOVELESS: Objection, form, scope.

16           A. Well, based on the reading of Claim 1, that is  
17       the independent claim that Claim 3 depends on, it  
18       certainly appears so.

Easttom Dep. (Ex. 1042) at 68:10-18

## “Attaching” Limitations

### IPR2017-01799 – Petition

As explained in *Zydney*, the mode of messaging used is determined based on whether the intended recipient of the message is “online” or “offline” (e.g., is the recipient connected):

**The agent permits a number of distinct modes of communication based on the status of the recipient.**

IPR2017-01799, Pet. (Paper 1) at 59-60

## “Attaching” Limitations

### Zydney

The agent permits a number of distinct modes of communication based on the status of the recipient.

Zydney (Ex. 1006) at 14:19-20

If online, the originator can either begin a real-time “intercom” call which simulates a telephone call or a voice instant messaging session, which allows for an interruptible conversation.

If off line, the originator can either begin a voice mail conversation that will be delivered the next time the recipient logs in or can be delivered to the recipient’s e-Mail as a digitally encoded MIME attachment.

Zydney (Ex. 1006) at 15:8-21

# “Attaching” Limitations

## Zydney

A pack and send mode of operation is one in which the message is first acquired, compressed and then stored in a voice container 26 which is then sent to its destination(s).

Zydney (Ex. 1006) at 11:1-3

time "intercom" mode has been invoked, a small portion of the digitized voice is stored to account for the requirements of the Internet protocols for retransmission and then transmitted before the entire conversation has been completed.

Zydney (Ex. 1006) at 16:4-7

## Common Issues

- Construction of “Instant Voice Message”  
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- “Attaching” Limitations  
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(IPR2017-01799, -01800)
- “Instant Voice Message” Limitations  
(IPR2017-01799, -01800, -01801)
- “Nodes” Limitations  
(IPR2017-01799, -01800)
- “Network Interface” / “Within” Limitations  
(IPR2017-01797, -01798, -01799, -01800)
- Combining *Griffin* and *Zydney*  
(IPR2017-01797, -01798, -01802)

# “Instant Voice Message” Limitations

## Instant Messaging as Was Known in the Art Petition

Indeed, *Griffin's* description of real-time speech messaging is consistent with how instant messaging is described in the specification of the '433 Patent, and was understood in the art (Ex. 1002, ¶¶17-30, 45-47, 99-100; Ex. 1024, 435, 936; Ex. 1025, 3-4; Ex. 1026, 1; Ex. 1028, 4-6, 11-14, 18, 218, Fig. 1.2; Ex. 1029, 9-10; Ex. 1030, 3; Ex. 1032, 36; Ex. 1036, ¶¶3-9; Ex. 1037, 2:12-3:27, 3:9-27.)<sup>7</sup>

IPR2017-01801, Pet. (Paper 1) at 14

Dr. Haas

### A. Instant Messaging

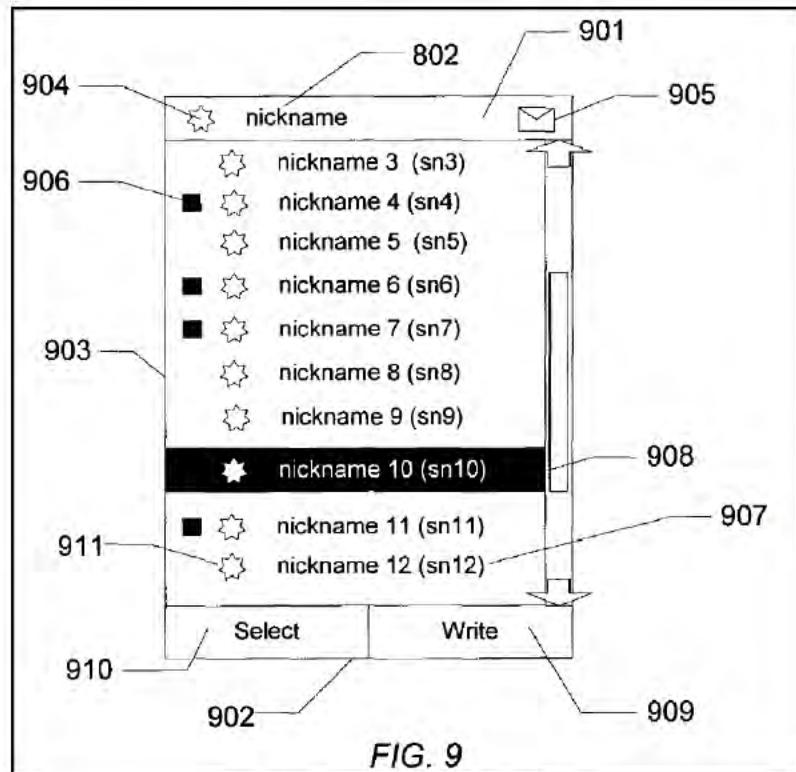
#### 1. General Background

18. At the time of the alleged invention, the term “instant messaging” was known to generally refer to a service that allows for real-time communication between users via text, voice, and video. (*See, e.g.*, Ex. 1024, 435.) The real-time nature of instant messaging differentiates it from other communication methods, such as e-mail, for example. (*See, e.g.*, Ex. 1036, ¶¶3-9; Ex. 1037, 2:12-24.)

IPR2017-01801, Haas Decl. (Ex. 1002) at ¶ 18

# “Instant Voice Message” Limitations

## Griffin – Presence Status



Griffin (Ex. 1005) at Fig. 9

FIG. 9 illustrates a buddy list display with its entries sorted alphabetically.

Each entry in the list comprises a selection indicator 906 that indicates whether the user has selected the particular buddy for chatting (i.e., sending a chat communication message), the buddy's presence status 911, the buddy's nickname 802 or 904, and/or the

Griffin (Ex. 1005) at 8:47-51

## “Instant Voice Message” Limitations

### Griffin – Real-Time Speech Conversations

#### Patent Owner

*Griffin* is unrelated to exchanging speech chat messages in real time.

IPR2017-01801, Resp. (Paper 12) at 9

#### Griffin

The present invention relates generally to communication systems incorporating speech and textual input and output modalities and, in particular, to a novel technique of managing the display of a plurality of **real-time speech and text conversations** (e.g., chat threads) on limited display areas.

Griffin (Ex. 1005) at 1:6-11

IPR2017-01801, Pet. (Paper 1) at 14; Reply (Paper 16) at 7

# “Instant Voice Message” Limitations

## Griffin – Voice (i.e., Speech) Messages Patent Owner

Every passage of *Griffin* that Petitioner relies on is directed explicitly toward text messaging. *Id.*

IPR2017-01801, Resp. (Paper 12) at 12

### Griffin

As shown, the mobile terminal **100** comprises a speaker **103** for rendering signals, such as received speech, audible;

Griffin (Ex. 1005) at 3:20-22

Click-holding the right softkey presents the user options such as playing back the available speech; viewing or storing available attachments; locking the entry in the chat history display; saving the inbound chat message in permanent storage **305**; moving to the next or previous chat message, replaying to only the sender or one of the other recipients (i.e., initiating a new thread), and so on.

Griffin (Ex. 1005) at 12:38-44

IPR2017-01801, Pet. (Paper 1) at 13; Reply (Paper 16) at 8

# “Instant Voice Message” Limitations

## Griffin – “Push-To-Talk Button 101”

### Patent Owner

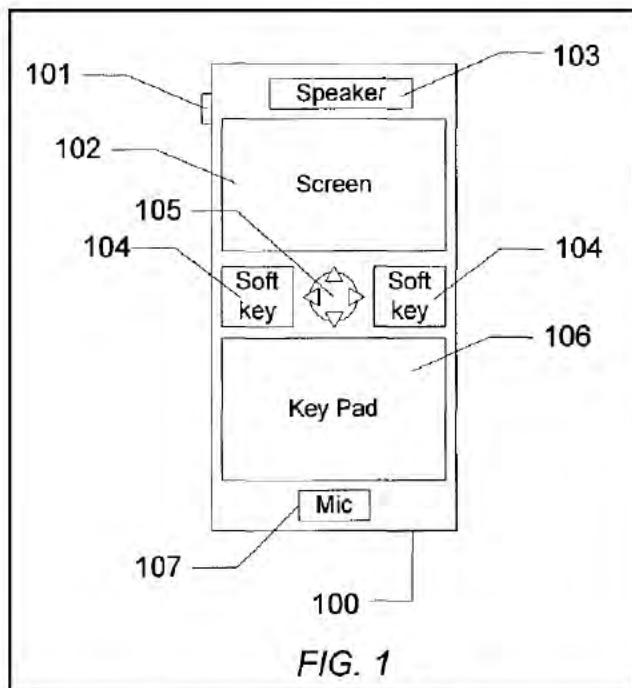
When the 2017 application for *Griffin* was filed, a PHOSITA would have recognized “push-to-talk” as technology that enables a mobile device to operate as a half-duplex radio similar to a walkie-talkie. EX2001, ¶ 38.

Every mention of push-to-talk in *Griffin* refers to that half-duplex, radio-based communication method.

IPR2017-01801, Resp. (Paper 12) at 13

# “Instant Voice Message” Limitations

## Griffin – “Push-To-Talk Button 101”



Griffin (Ex. 1005) at Fig. 1

If the user pushes the push-to-talk button 101 (referred to onward as pushes-to-talk) an audible indicator reminds the user that buddies have to be selected first.

If the user pushes-to-talk, the display switches to the chat history, and the user is able to record and transmit a speech message and consequently start a new thread with the selected buddies.

Griffin (Ex. 1005) at 9:17-31

If the user pushes-to-talk, the target recipients are compiled (i.e., either the sender and recipients of the chat message entry 1106, or the buddies of the buddy list entry 1107), the title bar is updated in a manner described in more detail with reference to FIG. 12, and the recording and transfer of a speech chat message begins.

Griffin (Ex. 1005) at 11:42-47

# “Instant Voice Message” Limitations

## Griffin – “Queuing” at Terminal Patent Owner

But even after composing the inbound chat message for an “Available” terminal, however, the message still may not be delivered: “It should be noted, that if an inbound speech message arrives while the chat history display is not visible to the user, the received speech is queued up.” *Id.* at 11:48–50. Thus, even if a terminal is listed as “Available,” the terminal still may not receive the message.

IPR2017-01801, Resp. (Paper 12) at 11-12

## Griffin

It should be noted, that if an inbound speech message arrives while the chat history display is not visible to the user, the received speech is queued up. In a current implementation, the most recently received speech message (or at least that portion that will fit in available memory) are queued at the receiving terminal.

Griffin (Ex. 1005) at 11:48-53

IPR2017-01801, Pet. (Paper 1) at 21, 67; Reply (Paper 16) at 7-8

## “Instant Voice Message” Limitations

### Griffin – “Queuing” at Server

#### Griffin

It should be noted, that if an inbound speech message arrives while the chat history display is not visible to the user, the received speech is queued up. In a current implementation, the most recently received speech message (or at least that portion that will fit in available memory) are queued at the receiving terminal. In an alternate embodiment, such queuing can occur at the server complex such that the recipient can request playback within a predetermined period of time.

Griffin (Ex. 1005) at 11:48-55

### The ’433 Patent

It should be understood that only the available IVM recipients, currently connected to the IVM server 202, will receive the instant voice message. It is noted that if a recipient IVM client is not currently connected to the local IVM server 202 (i.e., is unavailable), the IVM server temporarily saves the instant voice message and delivers it to the IVM client when the IVM client connects to the local IVM server 202 (i.e., is available).

IPR2017-01801, ’433 Patent (Ex. 1001) at 8:36-43

IPR2017-01801, Reply (Paper 16) at 6

# “Instant Voice Message” Limitations

## Griffin – “Queuing”

### Mr. Easttom

7           Q. In that particular scenario, would the message  
8        that's temporarily stored on the server be an instant  
9        voice message in the context of the claims of the '622  
10      patent?

11           A. Yes, and the reason being is that I, as sender,  
12        have sent this right now. I just didn't know you  
13        weren't available. The fact -- and you might have  
14        become unavailable after I sent the message. I mean,  
15        there -- it does take a few seconds for something to  
16        traverse a network. It would be entirely possible I  
17        sent you a message while you were available, and for any  
18        number of reasons, you became unavailable in transmit.  
19        That's still an instant message. It's just you've left  
20        the conversation prematurely.

Easttom Depo. (Ex. 1040) at 97:7-20

# “Instant Voice Message” Limitations

## Griffin – Heard in Real Time Patent Owner

It is uncontested that *Griffin* provides no explicit or inherent disclosure of an expectation that its “speech message” is both transmitted in real time and heard on the receiving end in real time. *See Pet.* 17 (collecting citations allegedly disclosing only that a speech message is *transmitted* in real time). Rather, *Griffin* discloses that “if an inbound speech message arrives while the chat history display is not visible to the user, the received speech is queued up.” EX1005, 11:48–50) *see also* EX2001 ¶ 49 (discussing the same).

IPR2017-01800, Resp. (Paper 16) at 28

## Mr. Easttom

So,  
the inbound chat message 500 received at the recipient terminal is delivered  
only (i.e., played) to the user without queuing when receipt of the inbound  
chat message 500 coincides with the chat history display being visible to the  
user.

IPR2017-01800, Easttom Decl. (Ex. 2001) at ¶ 49

IPR2017-01800, Reply (Paper 19) at 17

## Common Issues

- Construction of “Instant Voice Message”  
(IPR2017-01797, -01798, -01799, -01800, -01801)
- “Attaching” Limitations  
(IPR2017-01797, -01799, -01800, -01801)
- “Controlling a Method of Generating” Limitations  
(IPR2017-01799, -01800)
- “Instant Voice Message” Limitations  
(IPR2017-01799, -01800, -01801)
- “Nodes” Limitations  
(IPR2017-01799, -01800)
- “Network Interface” / “Within” Limitations  
(IPR2017-01797, -01798, -01799, -01800)
- Combining *Griffin* and *Zydney*  
(IPR2017-01797, -01798, -01802)

# “Nodes” Limitations (IPR2017-01799)

## ’747 Patent

2. A method for instant voice messaging over a packet-switched network, the method comprising:

receiving a list of nodes within the packet-switched network, the list of nodes including a connectivity status of each node, said connectivity status being available and unavailable, wherein a node within the list is adapted to be selected as a recipient of an instant voice message; displaying said list of nodes;

IPR2017-01799, ’747 Patent (Ex. 1001) at Claim 2

# “Nodes” Limitations (IPR2017-01799)

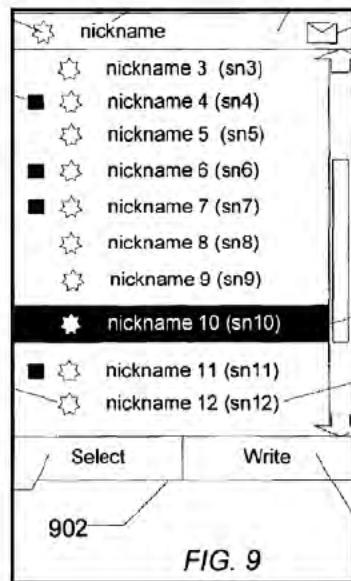
## Petition

Each mobile terminal 100 in *Griffin's* system/process represents one of the “nodes within the packet-switched network,” as claimed, because each terminal 100 is connected to network 203 (“packet-switched network”) and is a potential recipient of a speech (i.e., voice) chat message transmitted over network 203.<sup>11</sup> (Ex. 1005, 3:14-17, 3:49-61, 4:11-18, 4:44-54, 4:62-5:15, 6:56-7:11, 9:27-31, 11:42-47, Figs. 1-3; Ex. 1002, ¶¶144-45.) As explained in Part IX.A.1.a, each speech chat message is an “instant voice message,” as claimed.

IPR2017-01799, Pet. (Paper 1) at 45-46

# “Nodes” Limitations (IPR2017-01799)

## Griffin



The screenshot shows a list of recipient details for a group named "my buddies". The details include:

- List Type: GROUP
- No Groups: 1
- Group Name: my buddies
- Recipient IDs: 412, 321, 864
- No Ungrouped: 2
- Recipient IDs: 123, 104
- Recipient ID: 412
- Recipient Name: Jane Smith
- Recipient Nickname: Jane
- Recipient Short Name: JS
- Recipient Status: Available

Callout lines point to specific entries: 601 points to "List Type: GROUP"; 602 points to "No Groups: 1"; 603 points to "Group Name: my buddies"; 604 points to "Recipient IDs: 412, 321, 864"; 605 points to "No Ungrouped: 2"; 606 points to "Recipient IDs: 123, 104"; 502 points to "Recipient ID: 412"; 503 points to "Recipient Name: Jane Smith"; 504 points to "Recipient Nickname: Jane"; 505 points to "Recipient Short Name: JS"; and 607 points to "Recipient Status: Available". Ellipses (...) are also present.

FIG. 6

The screenshot shows a table of subscriber information. The columns are:

ID	Status	Address	Public Nickname	Public Short Name	Subscriber IDs
123	Available	123 210 12 112 2018	Jim4	JM	120, 415, 654
136	Off	113 10 112 10 8012	Chris	CC	345, 246, 235, 346
676	TextOnly	123 10 112 10 7291	JaneT	JT	102, 349

Callout lines point to specific entries: 701 points to the "Status" column header; 702 points to the "Address" column header; 703 points to the "Public Nickname" column header; 704 points to the "Public Short Name" column header; 705 points to the "Subscriber IDs" column header; and 706 points to the first row of the table.

FIG. 7

Griffin (Ex. 1005) at Figs. 6, 7, 9

IPR2017-01799, Pet. (Paper 1) at 45-56; Reply (Paper 24) at 18-19

# “Nodes” Limitations (IPR2017-01799)

## Griffin and Zydney

### Petition

Nevertheless, it would have been obvious to a POSA at the time of the alleged invention to modify *Griffin's* system/process based on the teachings of *Zydney* so that status 702 includes connectivity status information indicating whether terminal 100 is “available” or “unavailable” based on whether terminal 100 is currently connected to server complex 204. (*Id.*, ¶¶163-64.)

*Zydney* explains that connectivity status can be maintained and conveyed to others so that the system and its users can conveniently determine which agents are currently available to exchange messages, and proceed accordingly. (Ex. 1006, 14:20-15:1, 14:9-11, 16:7-17, Figs. 4, 8.)

IPR2017-01799, Pet. (Paper 1) at 55-56

# “Nodes” Limitations (IPR2017-01799)

## Patent Owner

Petitioner has therefore admitted (including through testimony of its declarant) that *Griffin* fails to expressly or inherently disclose that its so-called “status” indicates anything about the *connectivity status* of the terminal 100 *itself*, much less in terms of availability and unavailability.

Nowhere does *Griffin* state that its status 702 indicates the connectivity status of the terminal 100 itself.

IPR2017-01799, Resp. (Paper 21) at 12

IPR2017-01799, Reply (Paper 24) at 19-20

60

## “Nodes” Limitations (IPR2017-01799)

### Patent Owner

Patent Owner agrees with the Board’s repeated findings, in multiple related matters, that *Zydney* does not disclose or suggest that its “list of names” is received together with an included connectivity status of each one of multiple nodes. In addition to the repeated reasoning applied by the Board and summarized above, the deficiency arises, in part, from the perspective of the description in *Zydney* concerning its list of names.

IPR2017-01799, Resp. (Paper 21) at 17

IPR2017-01799, Reply (Paper 24) at 20

61

## “Nodes” Limitations (IPR2017-01799)

Dr. Haas

*Griffin*

explains that server complex 204’s presence manager 302 maintains the current status 702 of each terminal 100 in a table with “presence data records 700.” (Ex. 1005, 4:62-5:2, 5:11-30.) As shown in Figure 7 of *Griffin* (reproduced and annotated below), each presence data record includes a status indicator 702 of a terminal 100 (e.g., “Available” or “Off”), which is “an indicator of whether the recipient is ready to receive the particular type of message, speech and/or text messages only, etc.” (*Id.*, 5:12-15.)

IPR2017-01799, Haas Decl. (Ex. 1002) at ¶ 113

# “Nodes” Limitations (IPR2017-01799)

## Mr. Easttom

5           Q. So does the presence manager maintain the  
6 status of terminals in Griffin's network?

7           A. It maintains presence information about the  
8 terminals and/or the users.

Easttom Depo. (Ex. 1040) at 164:5-8

11          Q. So in figure 7, is that showing a record for  
12 different -- or strike that.

13                   Is each row a record for a terminal 100?

14          A. Well, it appears to be a record for an ID, but  
15 I would assume that that matches a particular terminal.  
16 But, for example, ID 136, is that some particular  
17 terminal?

Easttom Depo. (Ex. 1040) at 165:11-17

## “Nodes” Limitations (IPR2017-01800)

### ’723 Patent

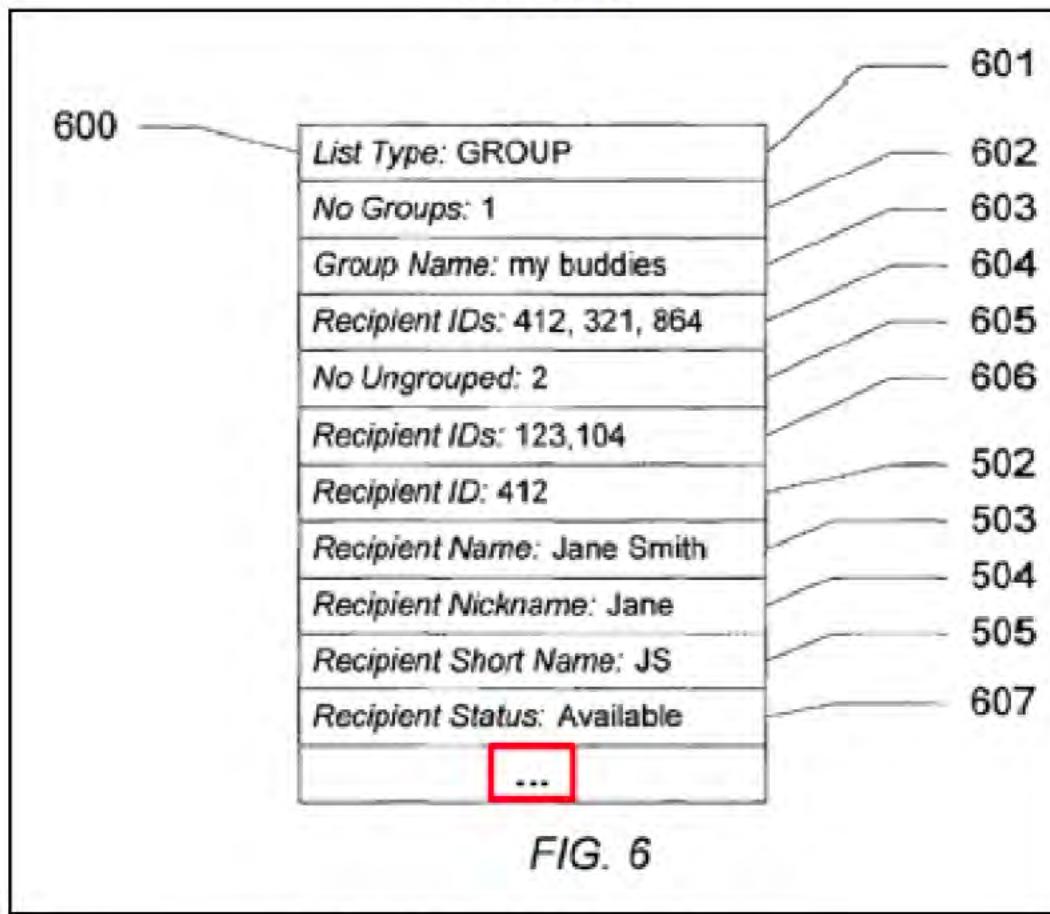
1. A method for instant voice messaging over a packet-switched network, the method comprising:
  - monitoring a connectivity status of nodes within the packet-switched network, said connectivity status being available and unavailable;
  - recording the connectivity status for each of the nodes;
  - associating a sub-set of the nodes with a client;
  - transmitting a signal to a client including a list of the

IPR2017-01800, ’723 Patent (Ex. 1001) at Claim 1

# “Nodes” Limitations (IPR2017-01800)

## Griffin – Buddy List Update Message 600

### Griffin



IPR2017-01800, Pet. (Paper 1) at 34

# “Nodes” Limitations (IPR2017-01800)

## Griffin – Buddy List Update Message 600

**Dr. Haas**

129. Because the buddy list update message 600 is composed and transmitted to the subscribing terminal 100, and the subscribing terminal 100 then stores and displays a buddy list containing the one or more users/terminals that are potential recipients of speech (i.e. voice) chat message (“sub-set of nodes”), which were identified in the buddy list update message 600, the “buddy list” and the “buddy list update message” both disclose associating one or more potential recipients (“sub-set of nodes”) with a subscribing terminal (“client”), as recited in claim element 1c.

IPR2017-01800, Haas Decl. (Ex. 1002) at ¶ 129

IPR2017-01800, Pet. (Paper 1) at 36; Reply (Paper 19) at 21

66

# “Nodes” Limitations (IPR2017-01800)

## Griffin – Buddy List Update Message 600

### Patent Owner

Petitioner has not saved its erroneous one-to-one association between people by pointing (in a footnote) to the ellipses illustrated at the bottom of Figure 6. Pet. 34 n.11. It does not matter how many distinct *one-to-one* associations are included within an update message 600. Each such association fails to disclose even one instance of the *plural-to-one* association explicitly required in the claim language “associating the sub-set of the nodes with a client,” where “the sub-set of the nodes” further satisfies the definitive perspective of being those having “the recorded connectivity status for each of the nodes in the sub-set.” See §VI.A–B, *supra*.

IPR2017-01800, Resp. (Paper 16) at 22

### Griffin

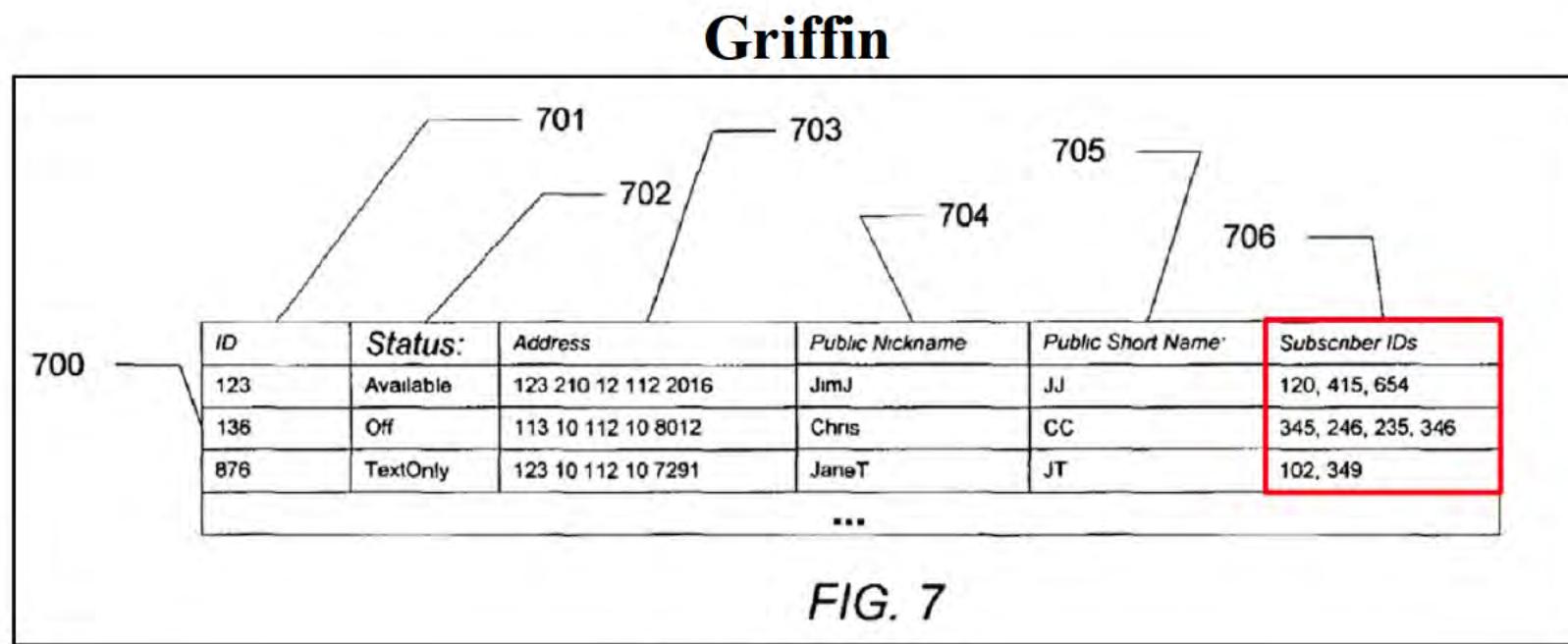
600	List Type: GROUP	601
	No Groups: 1	602
	Group Name: my buddies	603
	Recipient IDs: 412, 321, 864	604
	No Ungrouped: 2	605
	Recipient IDs: 123, 104	606
	Recipient ID: 412	502
	Recipient Name: Jane Smith	503
	Recipient Nickname: Jane	504
	Recipient Short Name: JS	505
	Recipient Status: Available	607
	...	

FIG. 6

Griffin (Ex. 1005) at Fig. 6

# “Nodes” Limitations (IPR2017-01800)

## Griffin – Presence Data Records 700



Griffin (Ex. 1005) at Fig. 7

# “Nodes” Limitations (IPR2017-01800)

## Griffin – Presence Data Records 700

### Dr. Haas

124. Each subscribing terminal 100 (“client”) is “associated” with one or more users/terminals within the network (the users/terminals being potential recipients of speech (i.e. voice) chat messages (“sub-set of nodes”)), because each subscribing terminal 100 is subscribed to the presence information of one or more other users/terminals within the network, which causes the identifier of the subscriber to be added to the presence data record of the one or more other users/terminals.

IPR2017-01800, Haas Decl. (Ex. 1002) at ¶ 124

IPR2017-01800, Pet. (Paper 1) at 32-33; Reply (Paper 19) at 18

# “Nodes” Limitations (IPR2017-01800)

## Griffin – Presence Data Records 700 Patent Owner

Citing first to

Figure 7 of *Griffin*, copied and annotated below for emphasis, Petitioner’s alleged association is a *one-to-one* mapping—within a record (i.e., a row) of the table in Figure 7—which points to *one person* identified by number in column 701 (“ID”) as the alleged “sub-set of the nodes” and *one person* identified by number in column 706 (“Subscriber ID”) as the alleged “client.” Pet. 32 (citing EX1002 ¶124).

Focusing on the first row of the table illustrated in Figure 7 of *Griffin*, for example, under Petitioner’s theory, that record purportedly associates the single user who is identified by her user’s identifier “123” (the alleged “sub-set of nodes”) with a subscribing user identified in the same row in column 706, such as the one identified by his subscriber ID “120” (i.e., the alleged “client”). *Id.*

Thus, by intended design, each record (i.e., row) of the table illustrated in Figure 7 (Petitioner’s alleged association) provides the presence information of *only one user* (not “*one or more*”) who is identified by her respective user’s identifier (“ID”) in column 701.

# “Nodes” Limitations (IPR2017-01800)

## Griffin – Presence Data Records 700

### Griffin

ID	Status	Address	Public Nickname	Public Short Name	Subscriber IDs
123	Available	123 210 12 112 2016	JimJ	JJ	120, 415, 654
136	Off	113 10 112 10 8012	Chris	CC	345, 246, 235, 346
876	TextOnly	123 10 112 10 7291	JaneT	JT	102, 349
***					

FIG. 7

Griffin (Ex. 1005) at Fig. 7

## “Nodes” Limitations (IPR2017-01800)

### Patent Owner

Second, a one-to-one association *between people* is not a plural-to-one association between a “sub-set of the nodes” and “a client”—i.e., *between devices*.

IPR2017-01800, Resp. (Paper 16) at 19

# “Nodes” Limitations (IPR2017-01800)

## Dr. Haas

118. In my opinion, the combination of *Griffin* and *Zydney* discloses these features. As I discussed above with respect to claim element 1a (Part IX.A.1.b), in the *Griffin-Zydney* combination, the current status 702 (“connectivity status”) of each terminal 100 (“nodes”) is monitored by presence manager 302. As shown in Figure 7 of *Griffin* (reproduced and annotated below), *Griffin* further explains that the presence manager 302 records the current status 702 (“connectivity status”) of each terminal 100 (“nodes”) as a field in the presence record 700 corresponding to the terminal 100. (Ex. 1005, 4:62-5:2, 5:15-37 (describing Fig. 7 and presence records 700), 6:61-64 (status 702 determined by message broadcaster 303 by first locating presence record 700); Fig. 7.)

IPR2017-01800, Haas Decl. (Ex. 1002) at ¶ 118

IPR2017-01800, Reply (Paper 19) at 22

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# “Nodes” Limitations (IPR2017-01800)

## Mr. Easttom

5           Q. So does the presence manager maintain the  
6 status of terminals in Griffin's network?

7           A. It maintains presence information about the  
8 terminals and/or the users.

Easttom Depo. (Ex. 1040) at 164:5-8

11          Q. So in figure 7, is that showing a record for  
12 different -- or strike that.

13                   Is each row a record for a terminal 100?

14          A. Well, it appears to be a record for an ID, but  
15 I would assume that that matches a particular terminal.  
16 But, for example, ID 136, is that some particular  
17 terminal?

Easttom Depo. (Ex. 1040) at 165:11-17

## Common Issues

- Construction of “Instant Voice Message”  
(IPR2017-01797, -01798, -01799, -01800, -01801)
- “Attaching” Limitations  
(IPR2017-01797, -01799, -01800, -01801)
- “Controlling a Method of Generating” Limitations  
(IPR2017-01799, -01800)
- “Instant Voice Message” Limitations  
(IPR2017-01799, -01800, -01801)
- “Nodes” Limitations  
(IPR2017-01799, -01800)
- “Network Interface” / “Within” Limitations  
(IPR2017-01797, -01798, -01799, -01800)
- Combining *Griffin* and *Zydney*  
(IPR2017-01797, -01798, -01802)

## “Network Interface” / “Within” Limitations

### ’622 Patent

3. A system comprising:  
a network interface connected to a packet-switched network;

IPR2017-01797, ’622 Patent (Ex. 1001) at Claim 3

### ’747 Patent

2. A method for instant voice messaging over a packet-switched network, the method comprising:  
receiving a list of nodes within the packet-switched network, the list of nodes including a connectivity status of each node, said connectivity status being available and unavailable, wherein a node within the list is adapted to be selected as a recipient of an instant voice message;

IPR2017-01799, ’747 Patent (Ex. 1001) at Claim 2

# “Network Interface” / “Within” Limitations

## Patent Owner – “Network Interface” Limitation

The above description unambiguously confirms that the claim limitation “connected to” refers to one element directly connected to another.

IPR2017-01797, Resp. (Paper 12) at 16

This further confirms that use of the phrase “connected to” in the claims defines how elements are directly connected.

IPR2017-01797, Resp. (Paper 12) at 18

# “Network Interface” / “Within” Limitations

## Patent Owner – “Within” Limitations

<sup>10</sup> Petitioner has not defended its rewrite of the claim language merely by arguing that “the specification contemplates an indirect connection to a packet-switched network, e.g., via a PSTN.” Pet. 20. The argument itself irrelevant because the specification offers no unambiguous lexicography that one element is “within” another simply because they are *indirectly connected* to one other.

IPR2017-01799, Resp. (Paper 21) at 19 n.8

As shown by Figure 2 of *Griffin*, copied below, the mobile terminals 100 clearly are not *within* network 203, which is the only element of *Griffin* that the Petition alleges is a “packet-switched network” as claimed. *Griffin* disclose in Figure 2 and its accompanying description that wireless carrier infrastructure 202 is interposed between mobile terminals 100 and network 203. This is uncontested. Pet. 49 (“terminal 100 is connected to network 203 indirectly via infrastructure 202”).

IPR2017-01800, Resp. (Paper 16) at 24

# “Network Interface” / “Within” Limitations

## '622 Patent

In addition to the foregoing IVM clients 206, 208, the IVM system 200 supports a legacy telephone 110 for instant voice messaging according to the present invention. The legacy telephone 110 is connected to a legacy switch 112. The legacy switch 112 is further connected to a media gateway 114. Both the legacy switch 112 and the media gateway 114 interconnect the legacy telephone 110 via the network 204 to the local IVM server 202, thereby facilitating instant voice messaging according to the present invention.

IPR2017-01797, '622 Patent (Ex. 1001) at 7:37-45

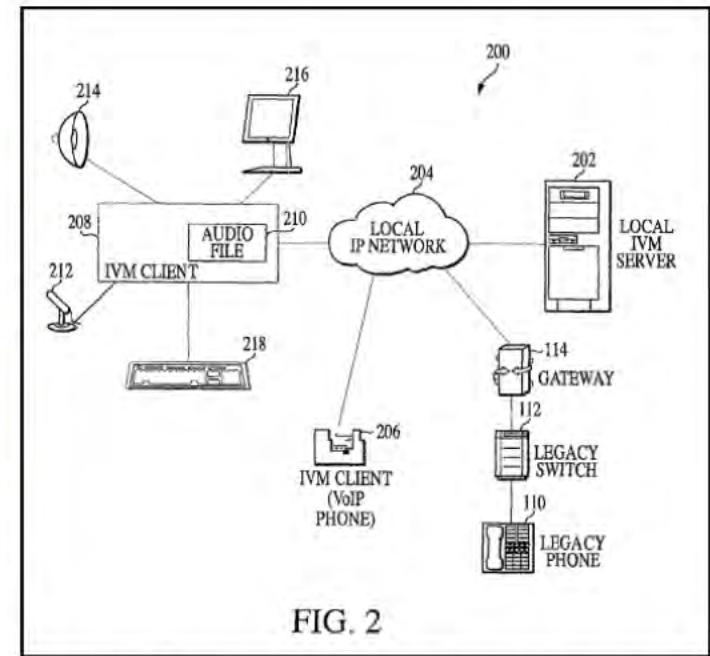


FIG. 2

IPR2017-01797, '622 Patent (Ex. 1001) at Fig. 2

# “Network Interface” / “Within” Limitations

## Mr. Easttom

24           Q. Okay. So is IVM client 208 connected to the IP  
25         network 102 as well? Sorry, I'm not sure I understood  
2         your answer.

3           A. In this diagram, it is. It goes through the  
4         local network.

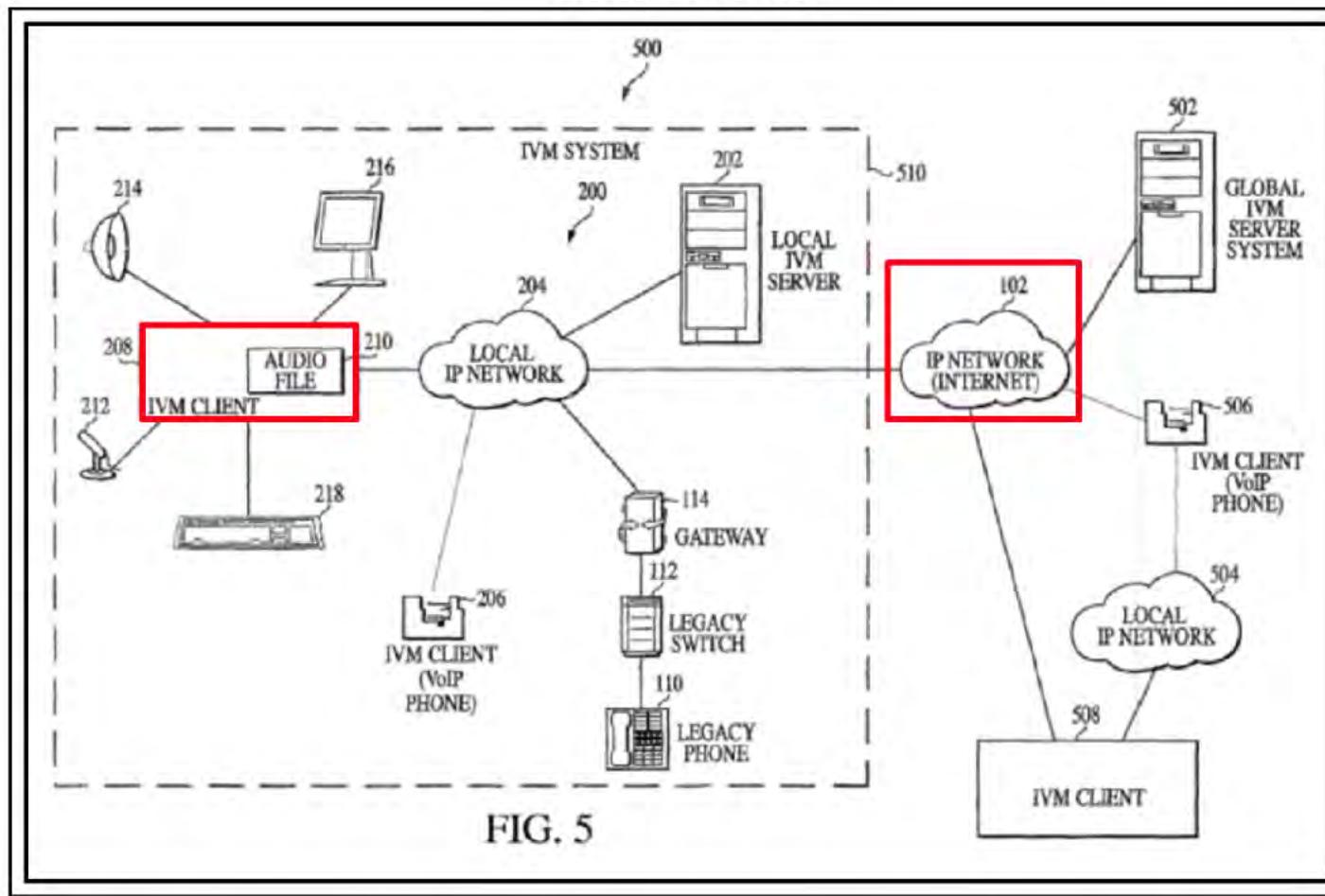
15           So, yes, you're connected to the internet,  
16         but you only utilize that connection if you want to  
17         leave your network.

18           So to answer, directly, your question, 208  
19         does have a connection to 102, the internet, and it only  
20         utilizes that when something needs to go outside the  
21         local network.

Easttom Depo. (Ex. 1040) at 145:24-146:21

# “Network Interface” / “Within” Limitations

## ’622 Patent

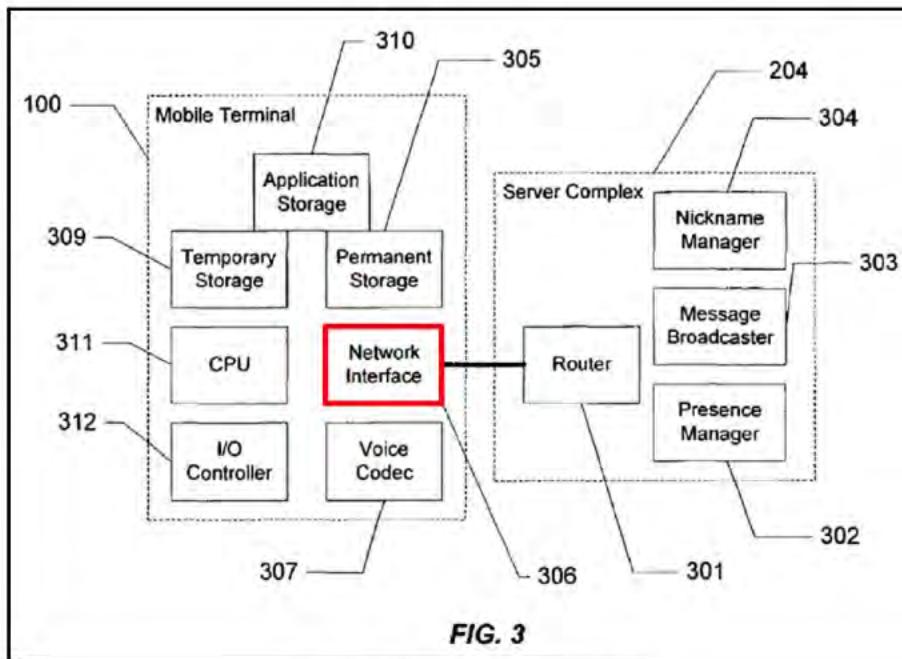


IPR2017-01797, ’622 Patent (Ex. 1001) at Fig. 5

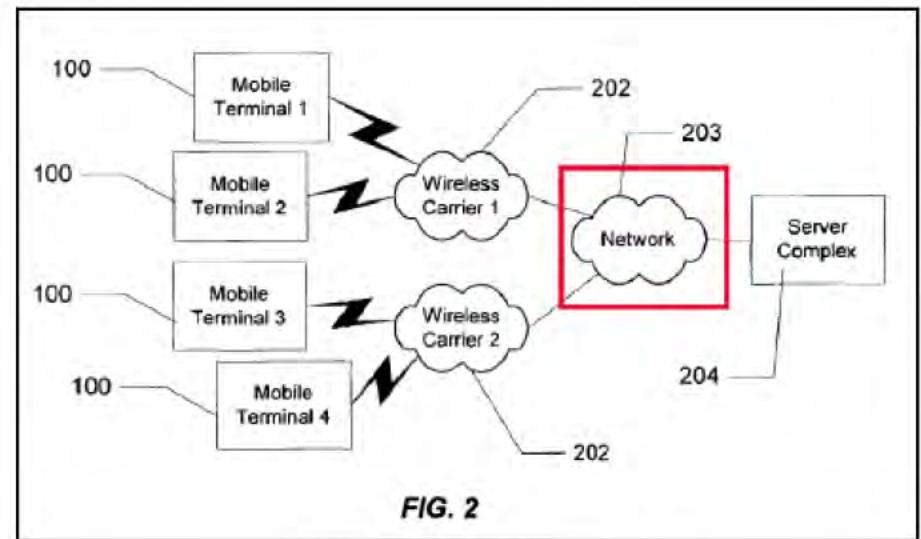
IPR2017-01797, Reply (Paper 17) at 7

# “Network Interface” / “Within” Limitations

## Griffin



Griffin (Ex. 1005) at Fig. 3



Griffin (Ex. 1005) at Fig. 2

## “Network Interface” / “Within” Limitations

**Direct Connection (If Required) Would Have Been Obvious**

### Petition

Even if the claim imposed such a requirement, however, it would have been obvious to a POSA at the time of the alleged invention to modify *Griffin's* system/process such that network interface 306 is directly connected to network 203 in view of the teachings of *Zydney*. (Ex. 1002, ¶106.)

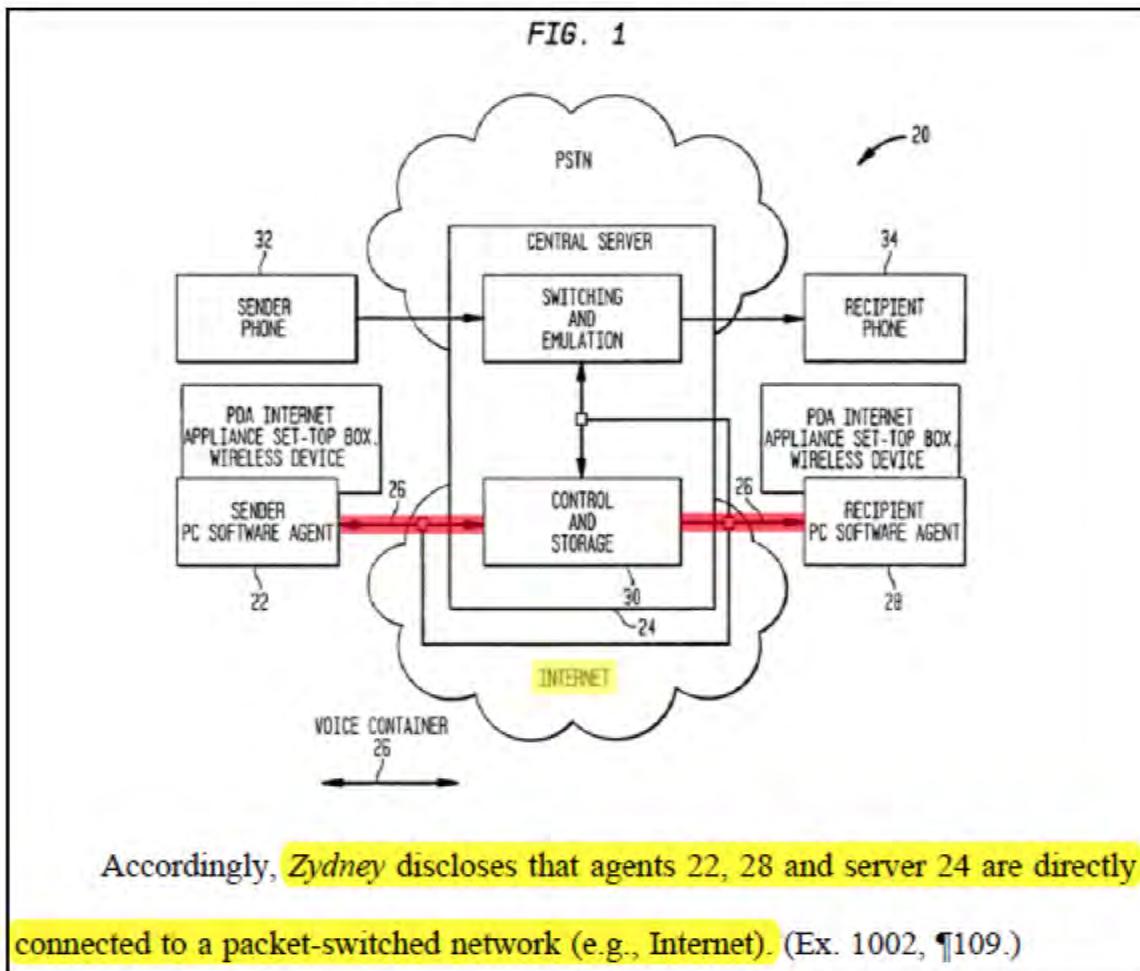
IPR2017-01797, Pet. (Paper 1) at 13

For example, a POSA would have been aware of the many well-known benefits of having a direct connection to network 203 (e.g., Ethernet), instead of or in addition to an indirect connection via infrastructure 202. (Ex. 1002, ¶111.)

IPR2017-01797, Pet. (Paper 1) at 15

# “Network Interface” / “Within” Limitations

## Petition – Zydney



IPR2017-01797, Pet. (Paper 1) at 14

## “Network Interface” / “Within” Limitations

### Patent Owner

*Griffin* teaches away from the proposed modification to its system. For example, *Griffin* states “the wireless carrier infrastructures 202 comprise *those elements necessary* to support wireless communications with the terminals 100.” EX1005 3:54-57 (emphasis added).

IPR2017-01797, Resp. (Paper 12) at 18

## “Network Interface” / “Within” Limitations

### Griffin

The terminals **100** communicate with at least one chat server complex **204** by wirelessly transmitting data to a corresponding wireless carrier's infrastructure **202**. As known in the art, the wireless carrier infrastructures **202** comprise those elements necessary to support wireless communications with the terminals **100**. Various service providers (such as Verizon or Sprint in the U.S., or Orange in Europe) build and maintain such infrastructures. The data packets are sent on to a communication network **203** that forwards them onto the server complex **204**.

Griffin (Ex. 1005) at 3:49-61

## “Network Interface” / “Within” Limitations

### Griffin

FIG. 1 illustrates a wireless mobile terminal **100** that may comprise any wireless communication device such as a handheld cellular phone or a wirelessly enabled Personal Digital Assistant (PDA).

Griffin (Ex. 1005) at 3:14-17

### Zydney

More specifically, the agent of the present invention may be adapted to work on a personal computer, wireless handheld computer such as a personal data assistant (PDA), digital telephone, or beeper.

Zydney (Ex. 1006) at 11:16-18

# “Network Interface” / “Within” Limitations

## Mr. Easttom

21           Q. So, in your opinion, mobile phones and PDAs  
22       could connect to WiFi networks at the time of the  
23       alleged invention?

24           A. Yes.

25           Q. Why would a mobile phone connect to a WiFi

2       network as opposed to just connecting to a wireless  
3       carrier network?

4           A. Well, it depends on how far back you want to  
5       go, but --

6           Q. At the time of the alleged invention.

7           A. If we look back to, say, the very, very late  
8       '90s, early 2000s, you have a condition where, first of  
9       all, data usage was incredibly expensive.

20           And if you had access to a WiFi, there would be  
21       a compelling reason to avoid the cellular charges and  
22       instead connect to the WiFi.

Easttom Depo. (Ex. 1040) at 101:21-102:22

IPR2017-01797, Reply (Paper 17) at 12

## Common Issues

- Construction of “Instant Voice Message”  
(IPR2017-01797, -01798, -01799, -01800, -01801)
- “Attaching” Limitations  
(IPR2017-01797, -01799, -01800, -01801)
- “Controlling a Method of Generating” Limitations  
(IPR2017-01799, -01800)
- “Instant Voice Message” Limitations  
(IPR2017-01799, -01800, -01801)
- “Nodes” Limitations  
(IPR2017-01799, -01800)
- “Network Interface” / “Within” Limitations  
(IPR2017-01797, -01798, -01799, -01800)
- Combining *Griffin* and *Zydney*  
(IPR2017-01797, -01798, -01802)

## Combining *Griffin* and *Zydney*

- Text-Only Buddies
- Messages Would Not Be Lost
- *Griffin* and *Zydney* Are Compatible

## Combining *Griffin* and *Zydney*

- Text-Only Buddies
- Messages Would Not Be Lost
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# Combining *Griffin* and *Zydney*

## Griffin

ID	Status	Address	Public Nickname	Public Short Name	Subscriber IDs
123	Available	123 210 12 112 2016	JimJ	JJ	120, 415, 654
136	Off	113 10 112 10 8012	Chris	CC	345, 246, 235, 346
876	TextOnly	123 10 112 10 7291	JaneT	JT	102, 349
...					

FIG. 7

Griffin (Ex. 1005) at Fig. 7

## Patent Owner

Petitioner's suggestion to replace *Griffin*'s status 702 with availability/unavailability as understood by *Zydney* would result in an inoperable system, at least for text-only buddies. EX2001 ¶¶ 62–64.

IPR2017-01797, Resp. (Paper 12) at 26

IPR2017-01797, Reply (Paper 17) at 21-22

## Combining *Griffin* and *Zydney*

### Petitioner

While *Griffin* does not provide additional details regarding what precisely status 702 indicates (*Id.*, ¶134), it would have been obvious to a POSA to configure the system such that status 702 to include connectivity information indicating whether client 100 is currently connected to server 204, based on the teachings of *Zydney*. (*Id.*, ¶¶135-44.)

IPR2017-01797, Pet. (Paper 1) at 23

IPR2017-01797, Reply (Paper 17) at 21-22

## Combining *Griffin* and *Zydney*

- Text-Only Buddies
- Messages Would Not Be Lost
- *Griffin* and *Zydney* Are Compatible

# Combining *Griffin* and *Zydney*

## Patent Owner

*Griffin* only makes available the most recent message. *Griffin* states: “In a current implementation, the most recently received speech message (or at least that portion that will fit in available memory) [is] queued at the receiving terminal.” EX1005, 11:50–53. A POSITA would understand this to mean that *only* the most recently received speech message (or portion thereof) is queued at the receiving terminal. EX2001 ¶ 31, 68. Also, as explained above, *Zydney* is concerned with routing *all* messages “to the appropriate recipients instantaneously or stored for later delivery.” EX1006, 1:20–22. If *Griffin* were to be combined with *Zydney* in the manner suggested by Petitioner, then all messages other than the most recent message would be lost. EX2001 ¶ 68.

IPR2017-01797, Resp. (Paper 17) at 29-30

IPR2017-01797, Reply (Paper 17) at 24-25

## Combining *Griffin* and *Zydney*

### Griffin

It should be noted, that if an inbound speech message arrives while the chat history display is not visible to the user, the received speech is queued up. In a current implementation, the most recently received speech message (or at least that portion that will fit in available memory) are queued at the receiving terminal. In an alternate embodiment, such queuing can occur at the server complex such that the recipient can request playback within a predetermined period of time. Further still, queuing could occur at both the terminal and the server-side such that playback may be requested from the server in the event that a given speech message is no longer available at the terminal. While the speech entry is the most recent speech entry, the associated speech remains queued and ready for automatic playback upon the user's return to the chat history display. When the user switches back to the chat history display, if the speech entry is visible on the screen, it is automatically played back. Only the last speech message received is automatically played back.

Griffin (Ex. 1005) at 11:48-67

# Combining *Griffin* and *Zydney*

## **Griffin**

Combined, the visual and audible notice indicate to the user that there is at least one unheard and/or unread inbound chat message **500** that has arrived at the terminal **100**.

Griffin (Ex. 1005) at 8:30-32

## **Mr. Easttom**

11 Q. So in this sentence from line 30 to 32 of  
12 column 8, it says "at least one unheard and/or unread  
13 inbound chat message."

14 What would a person of ordinary skill in  
15 the art understand by "at least one"?

16 A. Well, this goes back to the inference you just  
17 made that I think is correct. The only thing I can tell  
18 if I see that little icon and hear a sound is there's at  
19 least one message. There could be 1,000 for all I know,  
20 but there's at least one that I haven't listened to or  
21 read yet.

Easttom Depo. (Ex. 1040) at 171:11-21

IPR2017-01797, Reply (Paper 17) at 24-25

## Combining *Griffin* and *Zydney*

- Text-Only Buddies
- Messages Would Not Be Lost
- *Griffin* and *Zydney* Are Compatible

## Combining *Griffin* and *Zydney*

### Patent Owner

Including *Griffin* in the system described by *Zydney* would frustrate, if not eliminate, the purpose of *Zydney* (e.g., *Griffin* could not handle *Zydney's* peer-to-peer instant communication). EX2001 ¶ 63.

IPR2017-01797, Resp. (Paper 12) at 29

IPR2017-01797, Reply (Paper 17) at 23-24

## Combining *Griffin* and *Zydney*

### **Zydney**

Based on states, rules and type of devices provided, voice containers can be stored, transcoded and routed to the appropriate recipients instantaneously or stored for later delivery.

Zydney (Ex. 1006) at 1

In addition, the present invention for voice exchange and voice distribution provides the ability to store messages 30 both locally and centrally at the server whenever the recipient is not available for a prescribed period of time.

Zydney (Ex. 1006) at 11

# Combining *Griffin* and *Zydney*

## **Zydney**

It will track and maintain the status of all software agents. It will notify the software agent to send the voice container directly to the recipient if the recipient is available or it will store the voice container for the intended recipient if the recipient is not available.

The status of all recipients entered into the software agent is frequently conveyed to the software agent by the central server.

Zydney (Ex. 1006) at 14:6-22

## **Mr. Easttom**

13           Q. So the server is responsible for directing  
14        where the voice containers are sent based on the server  
15        determining the availability of the software agents?

16           A. I would agree with that, yes.

Easttom Depo. (Ex. 1040) at 187:13-16

# Combining *Griffin* and *Zydney*

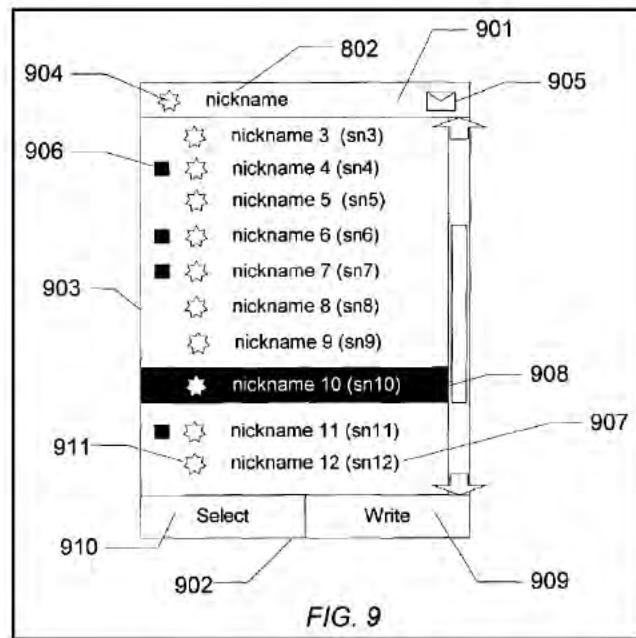
## Griffin

Those having ordinary skill in the art will recognize that the server complex 204 can be placed inside a wireless carrier's infrastructure 202, or that it may be eliminated in cases where direct terminal-to-terminal transfer is supported.

Griffin (Ex. 1005) at 4:18-21

In another embodiment, parts (or all) of the functionality of the message broadcaster 303 and the nickname manger 304 can reside on the terminal 100. In that case, the terminal 100 communicates with the server complex 204 when it exchanges presence information. Chat communication messages are broadcast from one terminal 100 to the plurality of other terminals 100 in a point-to-point fashion.

Griffin (Ex. 1005) at 8:8-14



Griffin (Ex. 1005) at Fig. 9

## Other Issues

- “Object Field” Limitation  
(IPR2017-01797, -01798)
- “Connection Information” / “Current Connection” Limitations  
(IPR2017-01797, -01798)
- “Message Database” / “Database Record” Limitations  
(IPR2017-01798, -01801)

## Other Issues

- “Object Field” Limitation  
(IPR2017-01797, -01798)
- “Connection Information” / “Current Connection” Limitations  
(IPR2017-01797, -01798)
- “Message Database” / “Database Record” Limitations  
(IPR2017-01798, -01801)

# “Object Field” Limitation

## ’622 Patent

3. A system comprising:
  - a network interface connected to a packet-switched network;
  - a messaging system communicating with a plurality of instant voice message client systems via the network interface; and
  - a communication platform system maintaining connection information for each of the plurality of instant voice message client systems indicating whether there is a current connection to each of the plurality of instant voice message client systems,
- wherein the messaging system receives an instant voice message from one of the plurality of instant voice message client systems, and
- wherein the instant voice message includes an object field including a digitized audio file.

# “Object Field” Limitation

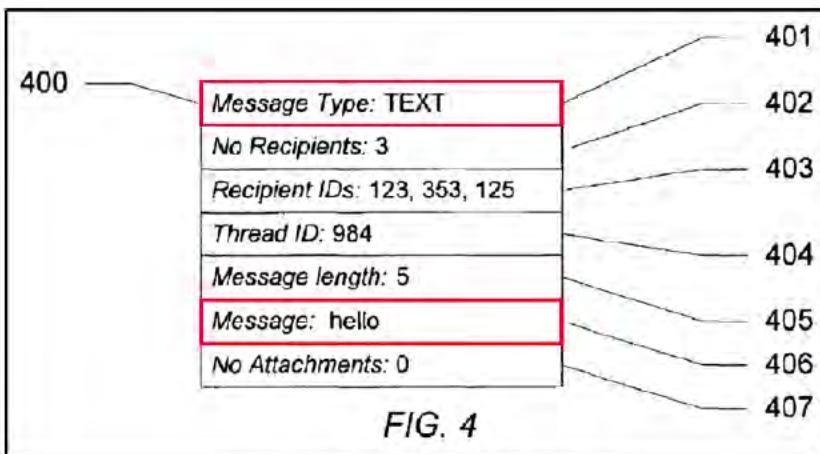
## Patent Owner

Thus, regardless whether a message is classified as speech or text, *Griffin* does not expressly or inherently disclose that “message content 406” can *itself* include anything other than displayable text.

IPR2017-01797, Resp. (Paper 12) at 10

# “Object Field” Limitation

## Griffin



Griffin (Ex. 1005) at Fig. 4

The outbound chat message 400 comprises a message type 401 (e.g., text, speech, and so on), a number of intended recipients 402, a plurality of recipient identifiers 403, a thread identifier 404, a message length 405, message content 406, and a number of attachments 407.

Griffin (Ex. 1005) at 6:39-44

Preferably, when a plurality of users chat together (i.e., send chat messages from one terminal 100 to another), data comprising text, speech, and/or graphical messages (or some combination thereof) are sent to the server complex 204. The server complex 204 then sends copies of the message out to the targeted terminals 100, preferably including, in one embodiment, the initiating or sending terminal.

Griffin (Ex. 1005) at 4:11-15

# “Object Field” Limitation

## Griffin

For example, in a presently preferred embodiment, the speech content of an outbound voice message is not copied back to the transmitting terminal; only a text portion of a voice message is sent back as in inbound message. (Note that, in a presently preferred embodiment, voice messages have text appended to them, even if only a generic character string or symbol is used to indicate that the message was a voice message. Of course, if speech-to-text conversion is available, the actual speech content of the message could be converted to text and copied back to the transmitting terminal.)

Griffin (Ex. 1005) at 10:39-44

# “Object Field” Limitation

## Petition

In view of these teachings and the knowledge of a POSA, a POSA would have been motivated to modify *Griffin's* system/process such that outbound message 400 (“instant voice message”) includes an object field (similar to field 406) having a digital audio file of speech data, similar to as described in *Zydney*. (Ex. 1002, ¶¶151-53.)

IPR2017-01797, Pet. (Paper 1) at 28-30

## Other Issues

- “Object Field” Limitation  
(IPR2017-01797, -01798)
- “Connection Information” / “Current Connection” Limitations  
(IPR2017-01797, -01798)
- “Message Database” / “Database Record” Limitations  
(IPR2017-01798, -01801)

### '622 Patent

3. A system comprising:

- a network interface connected to a packet-switched network;
- a messaging system communicating with a plurality of instant voice message client systems via the network interface; and
- a communication platform system maintaining connection information for each of the plurality of instant voice message client systems indicating whether there is a current connection to each of the plurality of instant voice message client systems,

wherein the messaging system receives an instant voice message from one of the plurality of instant voice message client systems, and

wherein the instant voice message includes an object field including a digitized audio file.

## “Connection Information” / “Current Connection” Limitations

### Patent Owner

While Petitioner alleges Zydney’s “[c]entral server 24 maintains and conveys the connectivity status of each agent in the network[,]” the word “current” is noticeably absent from that characterization. Pet. 23. Perhaps Petitioner recognized that *Zydney’s* central server 24 passively waits to receive random status information notifications from the software agents: “the sender will log on, authenticate, and notify the central server of its status.” EX1006 14:3-4; *see also id.* at 14:20-21 (“The status of all recipients *entered into the software agent ....*”) (emphasis added); 31:13-15.

## “Connection Information” / “Current Connection” Limitations

### Zydney

It will track and  
maintain the status of all software agents.

Zydney (Ex. 1006) at 14:8-9

The status of  
all recipients entered into the software agent is frequently conveyed to the software  
agent by the central server. This includes whether the core states of whether the  
recipient is online or offline, but also offers related status information, for example  
whether the recipient does not want to be disturbed.

Zydney (Ex. 1006) at 14:20-5:1

## “Connection Information” / “Current Connection” Limitations

### Zydney

After the software agent has logged onto the system and has been authenticated they will have access to the system. During the authentication process the Internet address of the newly authenticated software agent will be made known to all other interested software agents and retained in the proxy server.

Zydney (Ex. 1006) at 32:9-12

When a software agent logs off the system all remaining interested, logged on software agents will be notified that the software agent is no longer available.

Zydney (Ex. 1006) at 32:16-17

## Other Issues

- “Object Field” Limitation  
(IPR2017-01797, -01798)
- “Connection Information” / “Current Connection” Limitations  
(IPR2017-01797, -01798)
- “Message Database” / “Database Record” Limitations  
(IPR2017-01798, -01801)

## “Message Database” / “Database Record” Limitations

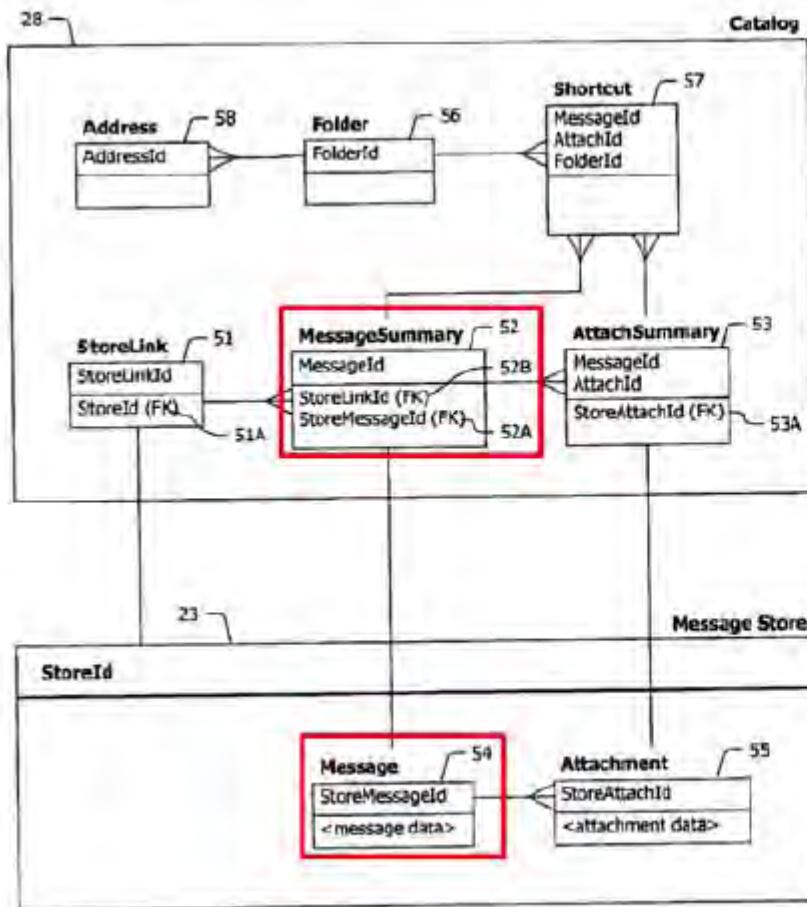
### **'622 Patent**

14. The system according to claim 13, wherein the instant voice messaging application includes a message database storing the instant voice message, wherein the instant voice message is represented by a database record including a unique identifier.

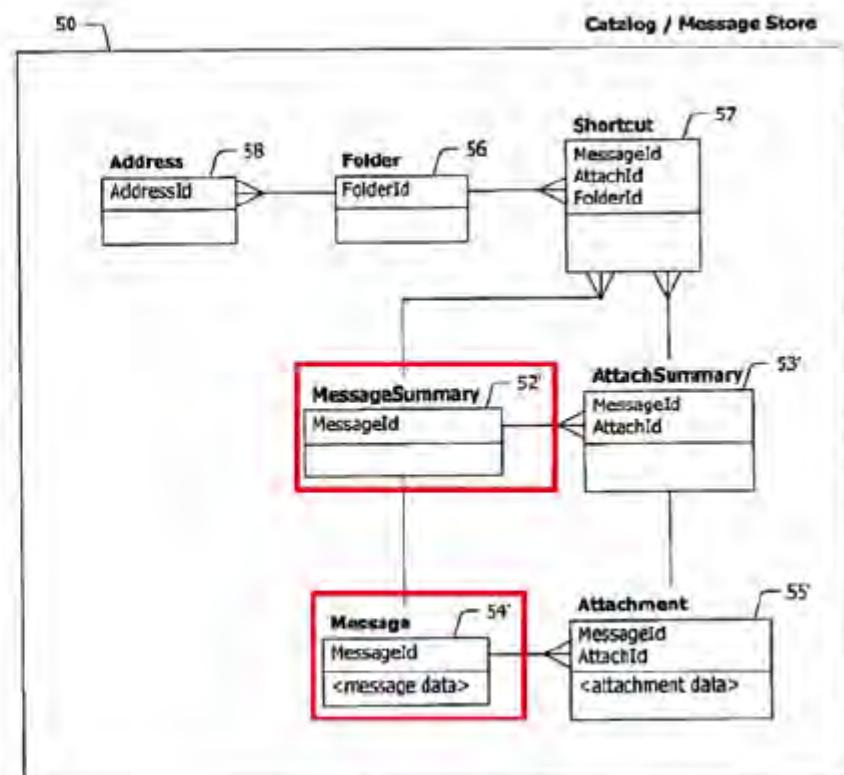
IPR2017-01797, '622 Patent (Ex. 1001) at Claim 14

# “Message Database” / “Database Record” Limitations

Clark



**FIG. 5A**



**FIG. 5B**

Clark (Ex. 1007) at Figs. 5A-5B

IPR2017-01798, Pet. (Paper 1) at 44-51; Reply (Paper 17) at 15-16