

**Case No.: IPR2023-01292
(Patent No. 7,324,802)
Patent Owner's Demonstrative Slides**

December 11, 2024 at 1:00 PM ET

STA Group Exhibit 2009
Motorola Solutions Inc. v. STA Group LLC
IPR2023-01292

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Summary of the '802 Patent

US 7,324,802 B2

(12) **United States Patent** **Jennings**

(10) **Patent No.:** US 7,324,802 B2
(45) **Date of Patent:** Jan. 29, 2008

(54) **METHOD AND SYSTEM FOR MANAGING COMMUNICATION IN EMERGENCY COMMUNICATION SYSTEM**

2005/0197096 A1* 9/2005 Yang et al. 455:404-1
2005/0231526 A1* 9/2005 Cheng 455:404-1
2005/0233726 A1* 10/2005 Katsube et al. 455:404-1

OTHER PUBLICATIONS

Arim, "ARINC Demo Shows How Police, Fire, EMS, and Authorities Can All Communicate" (from ARINC News), Mar. 23, 2004 (Release: Apr. 1966), 2 pages.
(www.911dispatch.com), "Typical Public Safety Comm Centers", updated Sep. 3, 2003, 5 pages.
* cited by examiner

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(73) Assignee: **Cisco Technology, Inc.**, San Jose, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 113 days.

(21) Appl. No.: **11/039,569**

(22) Filed: **Jan. 20, 2005**

(65) **Prior Publication Data**

US 2006/0160522 A1 Jul. 20, 2006

(51) **Int. Cl.**

H04M 11/04 (2006.01)

(52) **U.S. Cl.** 455:404.1

(53) **Field of Classification Search**

See application file for complete search history.

(56) **References Cited**

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(57) **ABSTRACT**

A method and system for managing communication in an emergency communication network is described. The emergency communication network receives a plurality of radio messages from a plurality of channels. The incoming radio messages sometimes overlap in time. Incoming radio messages can be prioritized and played back on the basis of the priority and the time of receipt. In case of overlap of the incoming radio messages in time, the radio message with the highest priority is played first, while the remaining radio messages are stored in a queue. The queue is formed again on the basis of priority. The stored radio messages are played subsequent to the completion of the radio message with the higher priority.

21 Claims, 5 Drawing Sheets

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graph TD
    Start([Start]) --> R1[Receive the first radio message on the first channel]
    R1 --> R2[Receive the second radio message on the second channel]
    R2 --> D1{Is the second radio message overlapping with the first radio message?}
    D1 -- Yes --> C1[Calculate the priorities]
    C1 --> I1[Identify the radio message with the highest priority]
    I1 --> P1[Play the radio message with the highest priority]
    P1 --> D2{Is the playtime for the radio message being played is over?}
    D2 -- No --> K1[Keep playing the radio message being played]
    K1 --> D2
    D2 -- Yes --> P2[Play the stored radio message with the highest priority]
    P2 --> D2
    D1 -- No --> P3[Play the incoming radio message on the basis of time of receipt]
    P3 --> S1[Store the radio messages that are not being played in the queue according to the priority]
    S1 --> D2
    K1 --> Stop([Stop])
    
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Ex. 1001 ('802 Patent), Cover; POR at 3-6

(12) **United States Patent**
Jennings

(54) **METHOD AND SYSTEM FOR MANAGING COMMUNICATION IN EMERGENCY COMMUNICATION SYSTEM**

(75) Inventor: **Cullen Jennings**, San Jose, CA (US)

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(54) 2005/0197096 A1 * 9/2005 Yang et al. 455/404.1
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2005/0233726 A1 * 10/2005 Katsube et al. 455/404.1

OTHER PUBLICATIONS

Arinc, "ARINC Demo Shows How Police, Fire, EMS, and Authorities Can All Communicate" (from ARINC News), Mar. 23, 2004 (Release: Apr. 1966), 2 pages.
(www.911dispatch.com), "Typical Public Safety Comm Centers", updated Sep. 3, 2003, 5 pages.

* cited by examiner

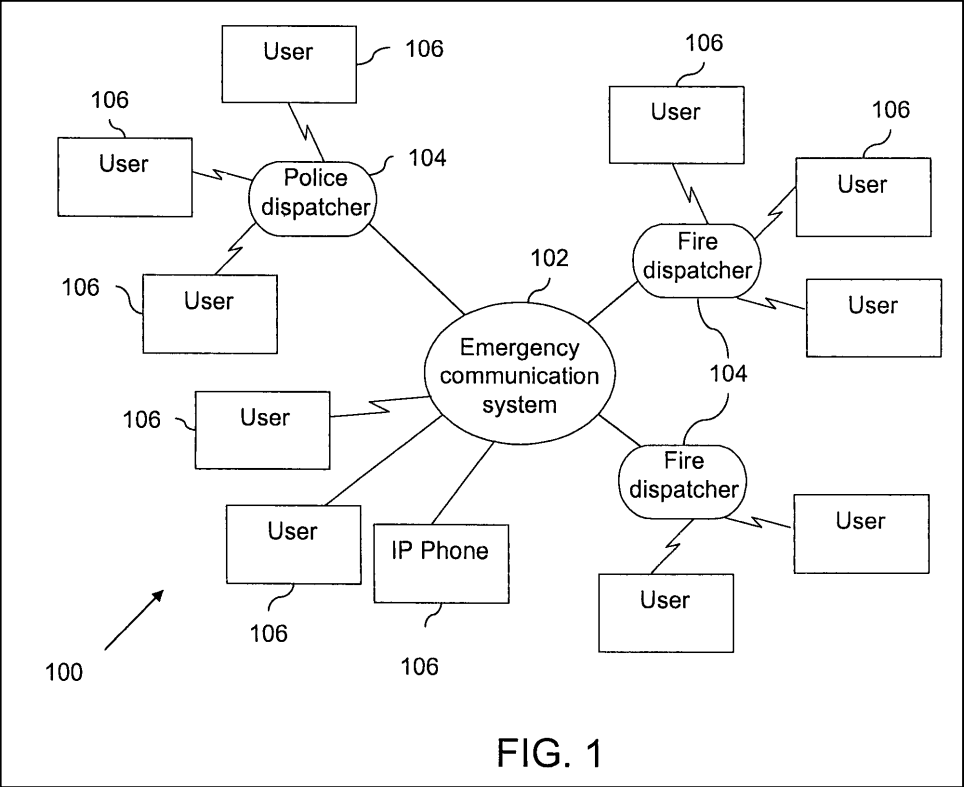
Primary Examiner—Lester G. Kincaid
Assistant Examiner—Diego Herrera
(74) Attorney, Agent, or Firm—Trellis Intellectual Property Law Group, PC

(57)

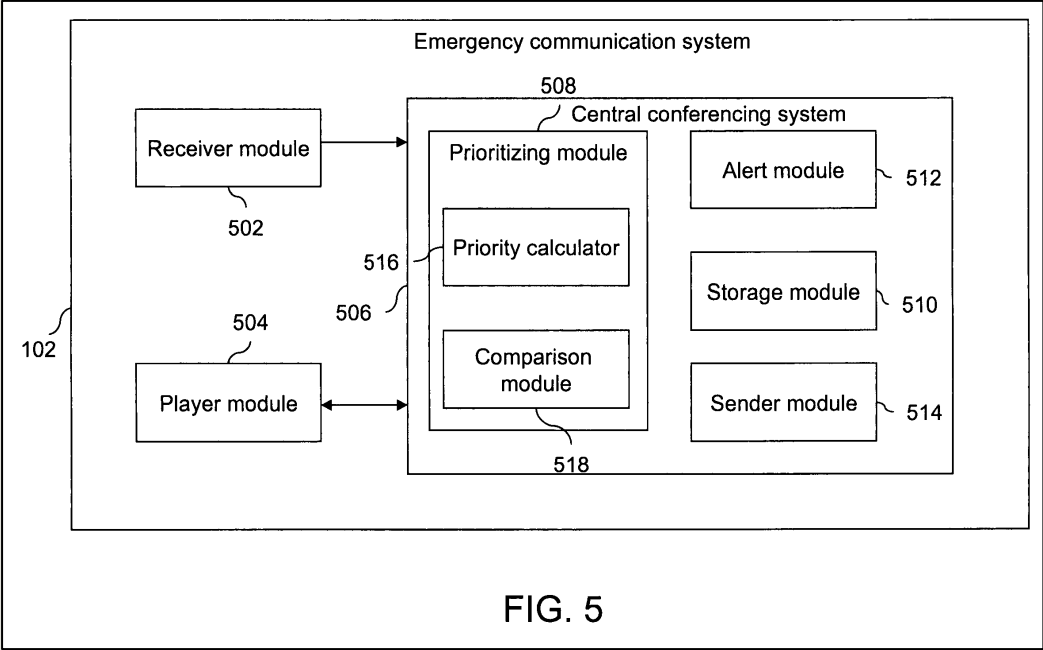
ABSTRACT

A method and system for managing communication in an emergency communication network is described. The emergency communication network receives a plurality of radio messages from a plurality of channels. The incoming radio messages sometimes overlap in time. Incoming radio messages can be prioritized and played back on the basis of the priority and the time of receipt. In case of overlap of the incoming radio messages in time, the radio message with the highest priority is played first, while the remaining radio messages are stored in a queue. The queue is formed again on the basis of priority. The stored radio messages are played subsequent to the completion of the radio message with the higher priority.

Summary of the '802 Patent



Ex. 1001 ('802 Patent), Fig. 1; POR at 3-6



Ex. 1001 ('802 Patent), Fig. 1; POR at 3-6

Summary of the '802 Patent

What is claimed is:

1. A method of managing communication in a communication system, the communication system receiving messages from a plurality of channels, the method comprising:

- receiving a first message on a first dedicated channel from amongst the plurality of channels at the communication system, the plurality of channels being dedicated to different entities, the first dedicated channel being dedicated to receiving messages from a first entity;
- receiving a second message on a second dedicated channel being dedicated to receiving messages from a second entity from amongst the plurality of channels at the communication system, the second message overlapping with the first message in time;
- determining one or more priorities for the first message received on the first dedicated channel from the first entity and the second message received on the second dedicated channel from the second entity based on at least one pre-defined parameter;
- determining which message out of the first message and the second message should be stored and subsequently played based on the second message overlapping with the first message in time and one or more priorities assigned to the first and the second message;
- playing the message having a higher priority between the first and the second message;
- storing at least one message having a lower priority between the first and the second message based on the determination; and
- playing the stored message subsequent to completing playing of the message having higher priority.

Ex. 1001 ('802 Patent), Cl. 1; POR at 3-6

Ground No. 1
***Ohel* – Section 103**

Overview of Ohel

(19) **United States**
(12) **Patent Application Publication** (10) Pub. No.: **US 2004/0117859 A1**
Ohel (43) Pub. Date: **Jun. 17, 2004**

(54) **MULTIPLE CHANNEL DATA RECORDER AND METHOD FOR RECORDING DATA ON MULTIPLE CHANNELS** (52) U.S. CL. 725/146; 725/90; 725/62; 725/63; 725/118; 725/116

(76) Inventor: **Hagai Ohel**, Coconut Creek, FL (US) (57) **ABSTRACT**

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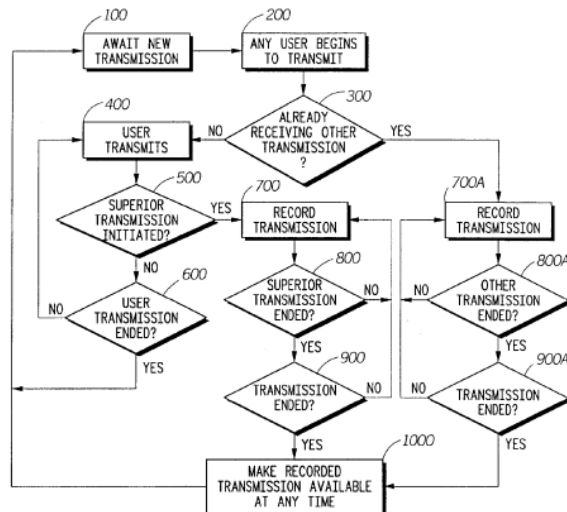
(21) Appl. No.: **10/320,948**

(22) Filed: **Dec. 16, 2002**

Publication Classification

(51) Int. Cl.⁷ H04N 7/16; H04N 5/91;
H04N 7/173; H04N 7/20;
H04N 7/08

A multiple channel data recorder and a method for recording data on multiple wireless communications channels includes a transceiver, a display, and a processor programmed to selectively record the user's transmission for playback by at least one of the user and another user and, if another new transmission starts to be received by the user during the user's transmission, to continue transmitting the user's transmission and to record the new transmission at least from a beginning of the new transmission for playback, or to stop transmitting the user's transmission and to start recording at least a remainder of the user's transmission at least from the beginning of the new transmission for playback, and to receive the new transmission by the user.



Ex. 1004 (Ohel), Cover; POR at 12-13

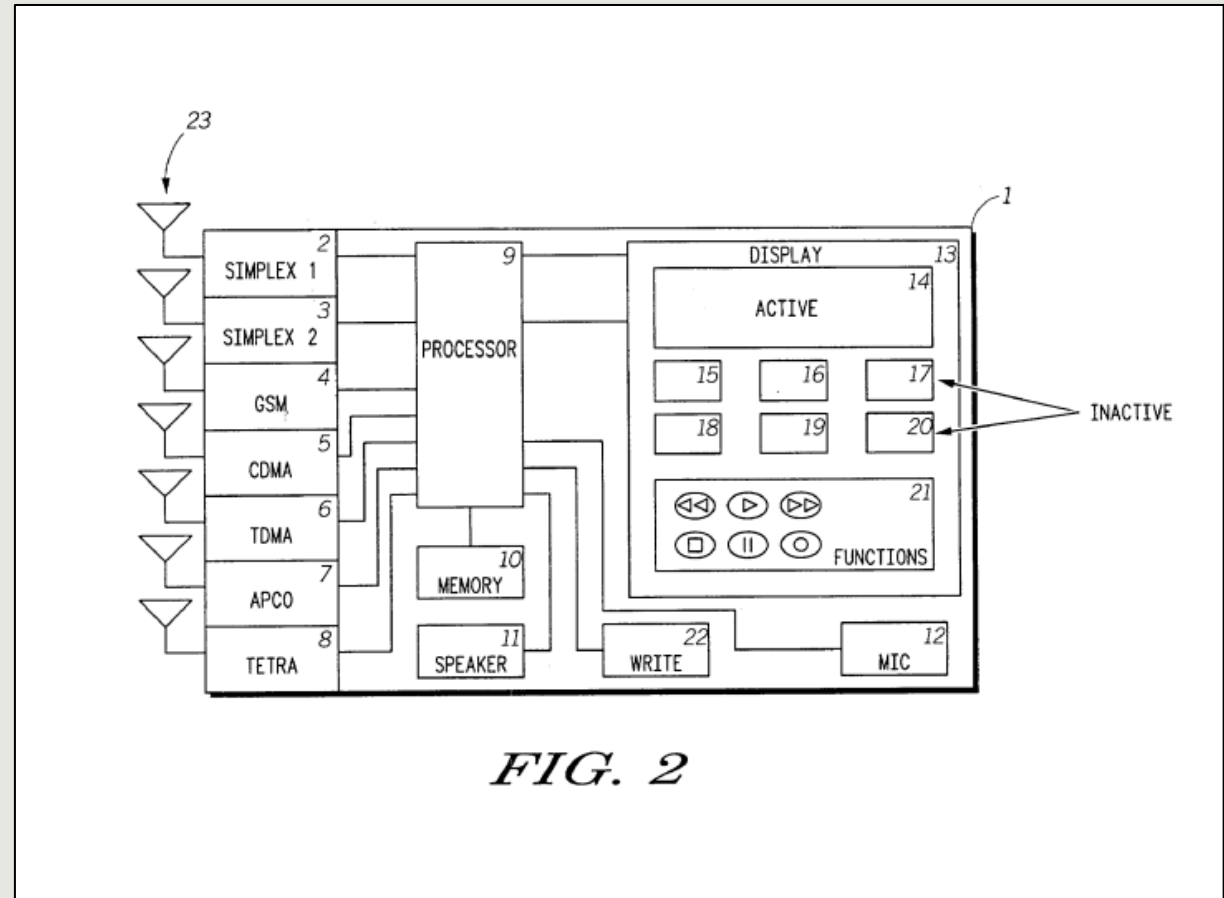


FIG. 2

Ex. 1004 (Ohel), Fig. 2; POR at 12-13

***Ohel's* Dispatcher Is Not an Entity**

The Claimed “Entities” of ‘802 Patent Are Different Than *Ohel*’s Claimed “Dispatcher”

- ***The claims of the ‘802 Patent make it clear that a dispatcher is not an entity through the well-established doctrine of claim differentiation.***

1. A method of managing communication in a communication system, the communication system receiving messages from a plurality of channels, the method comprising: receiving a first message on a first dedicated channel from amongst the plurality of channels at the communication system, the plurality of channels being dedicated to different entities, the first dedicated channel being dedicated to receiving messages from a **first entity**; receiving a second message on a second dedicated channel being dedicated to receiving messages from a **second entity** from amongst the plurality of channels at the communication system, the second message overlapping with the first message in time; determining one or more priorities for the first message received on the first dedicated channel from the first entity and the second message received on the second dedicated channel from the second entity based on at least one pre-defined parameter;

Ex. 1001 (‘802 Patent), Cl. 1; POR at 14-15; Sur-Reply at 9-10

6. The method of claim 1, wherein **determining the priority** comprises assigning priorities to the first message and the second message **based on inputs from a user**.

7. The method of claim 1, further comprising **informing an operator the time of receipt of a message** while playing the first message and the second message.

time. The receipt of multiple radio messages at one time creates confusion for an operator who needs to reply/act on each incoming radio message. To avoid this confusion, the

receiving messages. Dispatchers 104 are the operators who handle the communication for the emergency teams and respond to emergency messages received from a plurality of users 106. Emergency communication system 102 receives

Ex. 1001 (‘802 Patent), Cl. 6-7, 1:25-27, 3:59-62; POR at 14-15

The Specification of the '802 Patent Is Consistent With the Claims

- ***The specification of the '802 Patent makes it clear that an entity can include users.***

police force, and hospitals. Each emergency communication system supports a plurality of communication channels, wherein each channel may be dedicated to a group/locality/unit. For example, the fire department can allocate one channel to every school, or other public places such as shopping malls, so as to enable effective communication during an emergency.

This allocation of dedicated channels to different entities results in the possibility of multiple messages being received in the form of radio messages on different channels at one time. The receipt of multiple radio messages at one time

other process. The invention can operate between any two processes or entities including users, devices, functional systems, or combinations of hardware and software. Peer-

Ex. 1001 ('802 Patent), 1:15-25, 7:18-20; POR at 15-16

Both Declarants Confirm Dispatchers Are Operators

■ Mr. Williams

Q. At Line 59 starting with "dispatchers," it says, "Dispatchers 104 are the operators who handle the communication for the emergency teams and respond to emergency messages received from a plurality of users 106."

Do you see that?

A. Yes.

Q. In your opinion, are dispatchers operators?

A. In this particular context, which is discussing emergency communication systems, and the context of the patent, it's saying straight out dispatchers are the operators who handle the communication for the emergency team.

Ex. 2005 (Williams Dep. Tr.), 16:20-25, 17:1-7; POR at 15-16

■ Dr. Akl

58. A POSITA understands that dispatchers and operators are not users and not part of an entity. As explained above, and as understood by Ohel, an entity, and the multiple individual users which make up the entity, communicate on a *single* multi-party communication channel. A dispatcher or operator who is hearing multiple multi-party communication channels is not a user, nor part of any entity with a dedicated multi-party communication channel of the '802 Patent. Ex. 1001, 1:22-35. No disclosures in Ohel or the '802 Patent suggest otherwise. To consider Ohel's dispatcher as an entity, or a user within an entity, would be *contrary* to Ohel's acknowledgement of the reality of the relevant communications systems that *multi-party* communication occurs on a *single* multi-party communication channel.

Ex. 2007 (Akl Decl.) ¶ 58; POR at 15-16

Mr. Williams Believes Any Individual Can Be an Entity

Your position is an example of Ohel's alleged invalidating disclosure is that one police officer would be a first -- the claimed first entity and the police dispatcher could be the claimed second entity; is that right?

A. In this example, it's the -- another individual that the -- that an officer is talking to is the first entity which -- and it could be a police officer or it could be a common person. It could be his mother, I don't know. And then the -- then the -- in the same example, the dispatcher is the second entity breaking in.

Ex. 2005 (Williams Dep. Tr.), 70:14-25; POR at 23

Petitioner Wrongly Asserts Users, Operators, Dispatchers, and Entities Are the Same

- Unremarkably, the specification includes separate disclosures where users are informed of time of receipt.

Notably, the specification makes clear that entities can be users and frequently uses the terms “user” and “operator” interchangeably to describe the functionality in claim 7. *See, e.g.*, EX1001, 2:57-59 (“inform a user regarding the time of receipt”), 5:62-64 (“a user is informed about the time of receipt”), 6:31-33 (“inform the operator about the time of receipt”). Thus, the intrinsic record indicates that a dispatcher (an example of an operator) is a user and that users (including a dispatcher) can be entities, which is a broad term that includes individuals.

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7. The method of claim 1, further comprising informing an operator the time of receipt of a message while playing the first message and the second message.

Ex. 1001 ('802 Patent), Cl. 7; POR at 25

In further embodiments, the invention provides a central conferencing system for managing a plurality of radio messages received by an emergency communication system. The emergency communication system receives the radio messages on a plurality of channels and comprises a player for playing the radio messages. The central conferencing system comprises: (i) a prioritizing module for prioritizing the received radio messages, based on at least one predefined parameter; (ii) a sender module for sending the radio message with the highest priority to the player for playing; (iii) a storage module for storing the radio messages from amongst the plurality of radio messages that are not being played; and (iv) an alert module to inform a user regarding the time of receipt of a radio message, while playing the radio message.

Ex. 1001 ('802 Patent), 2:45-59

Ohel's "Overtalk" Is Fundamentally Different Than What the '802 Patent Identifies and Solves

- The '802 Patent addresses dispatcher confusion—an issue *dispatchers* face when receiving communications from *different entities*.

This allocation of dedicated channels to different entities results in the possibility of multiple messages being received in the form of radio messages on different channels at one time. The receipt of multiple radio messages at one time creates confusion for an operator who needs to reply/act on each incoming radio message. To avoid this confusion, the operator mutes all the channels except one, so as to clearly follow one channel. This results in the operator being able to follow the channel that is not a muted channel, while the message on the muted channels is lost.

Alternatively, the operator hears overlapping messages. However, in this case, there is a possibility of interference in the overlapping messages, resulting in garbled communication, which may not be of any use. In such a situation, no message being communicated can be used or retrieved.

Ex. 1001 ('802 Patent), 1:22-36; POR at 18-19; Sur-Reply at 6-7

- Ohel addresses "overtalk"—an issue affecting individual *officers* on a *single* multiparty communication channel within a *single entity*.

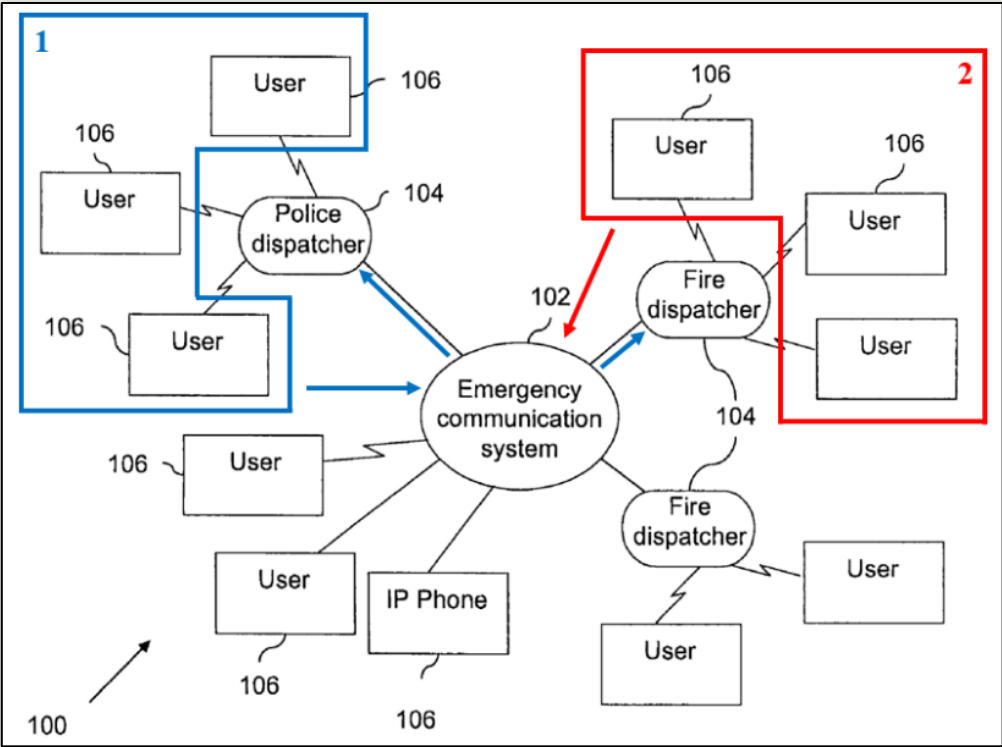
police and fire/rescue. In an example where police are communicating with one another, when a first officer is talking over the dispatch channel, all other officers tuned into that channel can hear the first officer and cannot talk until the first officer completes the communication. However, if a police dispatcher begins talking, the first officer's transmission is cut off and the dispatcher's communication is transmitted over the dispatch channel instead of the first officer's transmission. This feature is referred to herein as overtalk. In some instances of overtalk, the first officer

if any. During such communication, the first officer's message, cut off by the dispatcher's interruption, is entirely lost. In other words, no part of the cut off message remains for anyone to listen to, whether concurrently or at a later time. It is also possible to lose communications data when the first officer's zeal for continuing communication in spite of the dispatcher's overtalk prevented the first officer from entirely hearing the dispatcher's message. Presently, multi-party communication systems are not able to capture any of these "lost" communications.

Ex. 1004 (Ohel), [0005]; POR at 19-20 ; Sur-Reply at 6-7

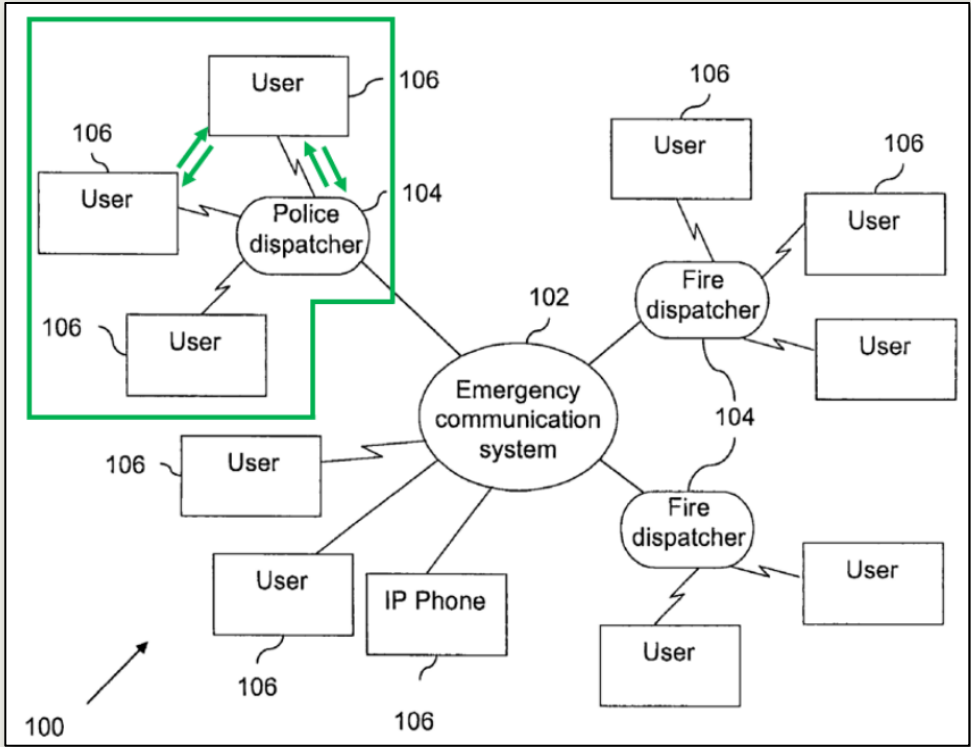
Ohel's "Overtalk" Is Fundamentally Different Than What the '802 Patent Identifies and Solves

- The '802 Patent addresses dispatcher confusion—an issue *dispatchers* face when receiving communications from *different entities*.



Ex. 1001 ('802 Patent), Fig. 1 (annotated); POR at 18; Sur-Reply at 4-6

- Ohel addresses “overtalk”—an issue *users* face when communicating within a *single* multiparty communication channel or a *single entity*.



Ex. 1001 ('802 Patent), Fig. 1 (annotated); POR at 21

Ohel's “Overtalk” Is Fundamentally Different Than What the ‘802 Patent Identifies and Solves

- The ‘802 Patent addresses dispatcher confusion by forming a queue based on priority for message storage.
- *Ohel* addresses “overtalk” by *recording* incoming user messages that have been cut off.

(57)

ABSTRACT

A method and system for managing communication in an emergency communication network is described. The emergency communication network receives a plurality of radio messages from a plurality of channels. The incoming radio messages sometimes overlap in time. Incoming radio messages can be prioritized and played back on the basis of the priority and the time of receipt. In case of overlap of the incoming radio messages in time, the radio message with the highest priority is played first, while the remaining radio messages are stored in a queue. The queue is formed again on the basis of priority. The stored radio messages are played subsequent to the completion of the radio message with the higher priority.

Ex. 1001 ('802 Patent), Abstract; POR at 20-23

[0009] Accordingly, the invention provides a multiple channel data recorder and method for recording data on multiple channels that overcome the hereinafore-mentioned disadvantages of the heretofore-known devices and methods of this general type and that prevent loss of communications during overtalk.

Ex. 1004 (Ohel), [0009]; POR 19-23

Ohel's "Overtalk" Is Fundamentally Different Than What the '802 Patent Identifies and Solves

- A POSITA would not use overtalk to remedy garbled messages.

59. Also, a POSITA understands that the operator hearing garbled messages due to crosstalk from the different entities would not attempt to solve this problem by using overtalk. If the operator were to use overtalk here, an incoming message being garbled will no longer be heard by the operator (regardless of whether it is recorded or not), but importantly, all of the users on that multi-party communication channel will be *unable* to carry on in real time with that entity's communications because the operator has taken floor control. In contrast, when the operator of the '802 Patent mutes an entire multi-party communication channel, the users in the entity *carry on* with their communications as normal in their multi-party communication channel because they maintain floor control, while the operator hears a different entity speaking on a different multi-party communication channel without any garbling.

Ex. 2007 (Akl Decl.) ¶ 59; POR at 20-21

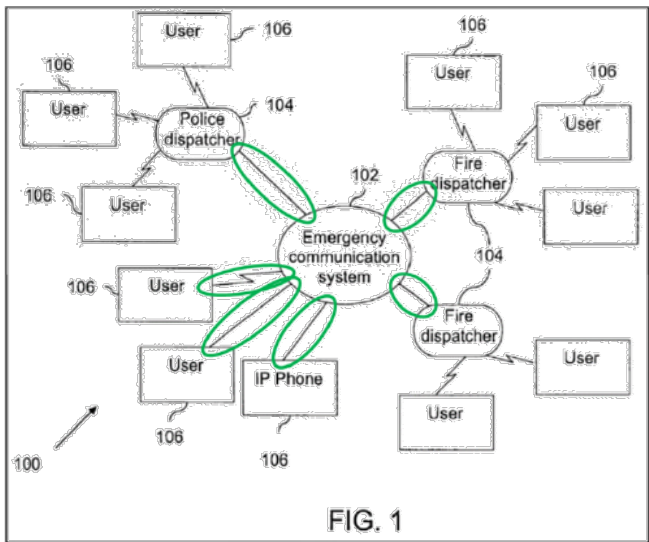
60. Muting an entire multi-party communication channel is very different from overtalk cutting off one user within a *single* multi-party communication. Accordingly, to the extent Ohel's purported solution could arguably provide a similar result as the '802 Patent's system and method, the purported solution would require many specialized hardware units, each with Ohel's "multiple channel data recorder" outfitted to the entire police force, each at significant cost. In contrast, the '802 Patent allows for police officers to use standard issue radios, which do not require any hardware or software upgrades, while only requiring the hardware implementing the invention to be used by the operator.

Ex. 2007 (Akl Decl.) ¶ 60; POR at 20-21

PO's Interpretation Does Not Exclude Figure 1's Embodiment

- Figure 1 and its description do not require dispatchers to be entities and users can communicate without being part of an entity

EX1001, 3:54-63 (emphases added). Figure 1 shows a “Police dispatcher” and “Fire dispatcher[s]” along with other users and devices communicating with emergency communication system 102 via dedicated channels:



EX1001, Fig. 1 (annotated); EX1033, 27:13-32:5. PO's interpretation would read out this embodiment. As the Board recognized, “[s]uch an interpretation is rarely,

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users 106. Emergency communication system 102 receives messages on a plurality of communication channels. The connection of emergency communication system 102 with plurality of users 106 can be a wired or wireless connection and may not be bounded by any geographical constraints. The messages can be received from users 106 from any suitable link or device, or in any suitable format such as via wireless devices, the Internet, Voice-over-IP (VoIP), telephones, or any other communication device. The data type of the messages can be, for example, text, audio or video format.

Ex. 1001 ('802 Patent), 3:62-4:5; Sur-Reply at 8

***Ohel* Does Not Prioritize Messages Based on a Type of Received Message**

***Ohel* Does Not Prioritize Messages Based on a Type of Received Message**

- ***Ohel* fails to determine priority based on a type of received message.**

1. A method of managing communication in a communication system, the communication system receiving messages from a plurality of channels, the method comprising: receiving a first message on a first dedicated channel from amongst the plurality of channels at the communication system, the plurality of channels being dedicated to different entities, the first dedicated channel being dedicated to receiving messages from a first entity; receiving a second message on a second dedicated channel being dedicated to receiving messages from a second entity from amongst the plurality of channels at the communication system, the second message overlapping with the first message in time; determining one or more priorities for the first message received on the first dedicated channel from the first entity and the second message received on the second dedicated channel from the second entity based on at least one pre-defined parameter;

4. The method of claim 1, wherein the predefined parameter comprises a type of the received messages.

5. The method of claim 4, wherein the type of received messages being one of a group comprising audio, video, text, and image.

Ex. 1001 ('802 Patent), Cls. 1, 4, and 5; POR at 24

Ohel Does Not Prioritize Messages Based on a Type of Received Message

- **Ohel** simply teaches prioritizing based on superior user status.

Q. So if you can open up Ohel, which is Exhibit 1004, at Paragraph 70. Let me know when you are there.

A. I'm there.

Q. Okay. So this says, in the first line, "In the first of the scenarios if the predefined protocol has been defined to force the officer to immediately listen to the dispatcher, then all communications over the user's CDMA Transceiver 5 would be preempted by the user's APCO Transceiver 7."

Do you see that?

A. Yes.

Q. So this is the priority based on superior user status we talked about before; right?

A. Yes.

Ex. 2005 (Williams Dep. Tr.), 86:3-24; POR at 25

[0070] In a first of the scenarios, if the predefined protocol has been defined to force the officer to immediately listen to the dispatcher, then, all communication over the user's CDMA transceiver 5 would be preempted by the user's APCO transceiver 7. (Alternatively, the dispatcher can have an emergency indication within the transmission that forces the officer to listen regardless of the officer's decision to listen at that time.) According to the invention, however, no

Ex. 1004 (Ohel), [0070]; POR at 25

***Ohel* Does Not Inform an Operator of Time of Receipt of a Message**

Ohel Does Not Inform an Operator of Time of Receipt of a Message

- *Ohel* does not teach claim 7.

7. The method of claim 1, further comprising informing an operator the time of receipt of a message while playing the first message and the second message.

Ex. 1001 (the '802 patent), claim 7; POR at 25

A. Yes.

Q. And so my question again is: Where in these paragraphs is your evidence that this display informs an operator of the time of receipt of a message?

A. It's -- it's -- it's -- it's an obviousness argument as I state in page -- in Paragraph 182. Time stamp being, from a POSITA

Ex. 2005 (Williams Dep. Tr.), 99:18-23; POR at 26; Sur-Reply at 10-12

Ohel Does Not Inform an Operator of Time of Receipt of a Message

- **Ohel's communication unit 1 is an officer's display, not a dispatcher's.**

72. The Petition states that an operator receives a time of receipt as required by claim 7, citing display 35 of Ohel's Figure 2. Petition, 36-37. Initially, the cited display 13 is part of communication unit 1, which is the police officer's communication device. Ex. 1004, [0067]-[0068], Fig. 2. Even if, at the time of a dispatcher's message interrupting an officer's message, and a time stamp were displayed on the communication unit 1, the *officer* would be informed of the time stamp by the display 13, *not the dispatcher*. Ex. 1004, [0070], Fig. 2. As explained above in relation to claim 1, the dispatcher of Ohel corresponds with the operator of the '802 Patent as recited in claim 7. Also, there is no disclosure in Ohel that the dispatcher uses the communication unit 1; instead, Ohel discloses that the users of communication unit 1 are police officers, and refers to this unit as "the *officer's unit 1*." Ex. 1004, [0067]-[0068], [0070]. For at least this reason, I disagree that Ohel discloses informing an operator of a time of receipt as asserted in the Petition and Mr. Williams.

Ex. 2007 (Akl Decl.) ¶ 72; POR at 25

Ohel Does Not Inform an Operator of Time of Receipt of a Message

- Dr. Akl confirmed *Ohel* does not render claim 7 obvious (left); Mr. Williams did not even analyze that issue (right).

73. Also, in my opinion, it would not be obvious to inform an operator of a time of receipt of a message as recited in claim 7. First, the Petition does not explain why *Ohel*'s system would inform its *dispatcher* of a time stamp, nor why a POSITA would view this as obvious. *Ohel*'s interruptions of messages occur *when the dispatcher's message* is transmitted. Since the dispatcher is the one transmitting the message, the dispatcher would innately know when the message is being transmitted and a POSITA would not see any need for the dispatcher's console to show a time stamp reflecting this information. There is no suggestion in *Ohel* that informing its dispatcher of the time a dispatcher transmits a message would be helpful or desirable, and I see no motivation for doing so. The Petition does not point to any disclosures of what *Ohel*'s dispatcher console would inform the dispatcher of and has not presented any reasons why *Ohel*'s system would be modified to inform the dispatcher of time of receipt of the message as recited in claim 7.

Ex. 2007 (Akl Decl.) ¶ 73; POR at 26

Why would an operator or a dispatcher of *Ohel* need to be told when it interrupted an officer's other transmission?

A. I haven't done specifically that analysis, but it would seem to be a reasonable thing to do in terms of particularly a dispatcher having a lot of things going on and wanting to know or be reminded when they did something. It doesn't seem -- it doesn't seem unreasonable.

Ex. 2005 (Williams Dep. Tr.), 100:11-20; POR at 26

***Ohel* Does Not Render All Elements of Independent Claim 11
Obvious**

The Petition Fails to Address Element 11[H]

- There is no evidence or argument that *Ohel* discloses or renders obvious ***“playing the stored messages having the highest priority.”*** (Element 11[H])

11. A method of managing communication in a communication system, the communication system receiving messages from a plurality of channels, the method comprising: receiving a first message on a first dedicated channel from amongst the plurality of channels at communication system, the plurality of channels being dedicated to different entities, the first dedicated channel being dedicated to receiving messages from a first entity; receiving a second message on a second dedicated channel being dedicated to receiving messages from a second entity at the communication system, the second message overlapping with the first message in time; prioritizing the first and second messages based on at least one predefined parameter; determining which message of the first message and the second message should be stored and subsequently played based on the second message overlapping with the first message in time and one or more priorities assigned to the first and the second message; playing the message having the highest priority; storing the message having lower priority in a queue on the basis of the determination and the prioritization; checking periodically the status of the message being played; and playing the stored message having the highest priority.

Ex. 1001 ('802 Patent), Cl. 11; POR at 26-27

11. Claim 11

Claim 11 is nearly identical to claim 1, with only a few minor differences.

First, claim 11 recites “*prioritizing the first and second messages based on at least one predefined parameter,*” instead of “*determining one or more priorities for the first message received on the first dedicated channel from the first entity and the second message received on the second dedicated channel from the second entity based on at least one pre-defined parameter.*” Second, claim 11 recites “*storing the message having lower priority in a queue.*” Third, claim 11 recites “*checking periodically the status of the message being played.*” Ex[1001], cls.1, 11; *Bancorp Sercs., LLC, v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1277 (Fed. Cir. 2012)(asserted system and medium claims treated as no different from the asserted method claims). *Ohel* discloses these additional features of claim 11.

Pet. at 41-42; POR at 27

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

PO-26

Mr. Williams Fails to Address Element 11[H]

Q. Well, this isn't off the top of your head. This is -- I'm showing you Element 1G and I'm showing you Element 11H, and I'm asking you if those claim elements are the same.

A. 1G versus 11H; right?

Q. Yeah. Are elements 11H and 1G the same?

A. No, not exactly the same.

Q. So in Paragraph 193, you talk about differences between Claim 11 and Claim 1, but you don't mention Element 11H; is that right?

A. That's correct.

Ex. 2005 (Williams Dep. Tr.), 102:24-103:5, 105:3:6; POR at 27; Sur-Reply at 11-12

Limitation 1[G] and 11[H] Are Distinct

1. A method of managing communication in a communication system, the communication system receiving messages from a plurality of channels, the method comprising: receiving a first message on a first dedicated channel from amongst the plurality of channels at the communication system, the plurality of channels being dedicated to different entities, the first dedicated channel being dedicated to receiving messages from a first entity; receiving a second message on a second dedicated channel being dedicated to receiving messages from a second entity from amongst the plurality of channels at the communication system, the second message overlapping with the first message in time; determining one or more priorities for the first message received on the first dedicated channel from the first entity and the second message received on the second dedicated channel from the second entity based on at least one pre-defined parameter; determining which message out of the first message and the second message should be stored and subsequently played based on the second message overlapping with the first message in time and one or more priorities assigned to the first and the second message; playing the message having a higher priority between the first and the second message; storing at least one message having a lower priority between the first and the second message based on the determination; and playing the stored message subsequent to completing playing of the message having higher priority.

Ex. 1001 ('802 Patent), Cl. 1; Sur-Reply at 12

11. A method of managing communication in a communication system, the communication system receiving messages from a plurality of channels, the method comprising: receiving a first message on a first dedicated channel from amongst the plurality of channels at communication system, the plurality of channels being dedicated to different entities, the first dedicated channel being dedicated to receiving messages from a first entity; receiving a second message on a second dedicated channel being dedicated to receiving messages from a second entity at the communication system, the second message overlapping with the first message in time; prioritizing the first and second messages based on at least one predefined parameter; determining which message of the first message and the second message should be stored and subsequently played based on the second message overlapping with the first message in time and one or more priorities assigned to the first and the second message; playing the message having the highest priority; storing the message having lower priority in a queue on the basis of the determination and the prioritization; checking periodically the status of the message being played; and playing the stored message having the highest priority.

Ex. 1001 ('802 Patent), Cl. 11; POR at 26-27

Ohel Does Not Render Element 11[F] Obvious

11. A method of managing communication in a communication system, the communication system receiving messages from a plurality of channels, the method comprising:
receiving a first message on a first dedicated channel from amongst the plurality of channels at communication system, the plurality of channels being dedicated to different entities, the first dedicated channel being dedicated to receiving messages from a first entity;
receiving a second message on a second dedicated channel being dedicated to receiving messages from a second entity at the communication system, the second message overlapping with the first message in time;
prioritizing the first and second messages based on at least one predefined parameter;
determining which message of the first message and the second message should be stored and subsequently played based on the second message overlapping with the first message in time and one or more priorities assigned to the first and the second message;
playing the message having the highest priority;
storing the message having lower priority in a queue on the basis of the determination and the prioritization;
checking periodically the status of the message being played; and
playing the stored message having the highest priority.

Ex. 1001 ('802 patent), Cl. 11; POR at 27-18

Ohel Does Not Render Limitation 11[F] Obvious

- A POSITA would have understood that storing messages in a queue is unnecessary to *Ohel's* user selectable storage.

[0048] If, however, the user's communications unit detects a superior user's transmission during the transmission of the user's message, an override process is initiated and begins in step 700. At this point, in one embodiment of the invention, the user's message begins recording so that a recipient can receive and process (decode, hear, view, etc.) the message at a later point in time. In an alternative embodiment of the invention, the method can always be recording the user's message and setting a flag at the point in time when a superior user's transmission is detected, the flag indicating a point of time during the user's transmission at which the superior user's transmission started interrupting the user's transmission. This flag can also be referred to as a time-stamp. Thus, at a later point in time, another user can review the user's entire transmission or a portion thereof, in particular, beginning at the time of the flag.

[0052] When a transmission is recorded, the transmission can be made available to users for playback (see step 1000) any time after recording begins.

Ex. 1004 (*Ohel*), [0048], [0052]; POR at 28

77. In a user-selectable message playback system, using a queue is unnecessary, and would likely be computationally less efficient than a typical dynamic memory, when such a queue's order is updated in response to user selections of messages which were ordered differently than the data's order as stored in the queue. It makes sense that Ohel discloses the use of dynamic memory rather than the use of a queue, since the dynamic memory should be more efficient handling Ohel's *user-selectable* play back requests.

78. Accordingly, a POSITA would understand that storing Ohel's messages in a queue would be contrary its user-selectable play back features. Also,

Ex. 2007 (*Akl Decl.*) ¶ 77; POR at 29

Ohel Does Not Render Limitation 11[F] Obvious

- A POSITA would have understood that storing messages in a queue is unnecessary to *Ohel's* user selectable storage.

[0055] In one embodiment, each user's communications unit can record incoming messages from all monitored sources. As such, a user can later decide which information is played back and when. In an alternative embodiment, the unit can record not only the incoming message, but also the outgoing message. As such, the user can fully replay a conversation in which the user participated. A third alternative can be to record only messages that are not presently the active input. In this context, the "active input" is that message presently being transmitted between the users, i.e., not being recorded in the background. With respect to FIG. 1, the active input can be, for example, the user's transmission when no other transmission is being sent or the superior user's transmission during the time of transmission. A fourth alternative can include ability for the user to switch from one active call to another. In such a case, the unit would continue or start to record that call from which the user just switched. In other words, if a user was speaking to user2 and decided to switch to user3, then the unit would record user2 from the time at which the user switched from user2 to user3. If recording were continuous for all calls, then recording would be flagged at the time at which the user switched from user2 to user3.

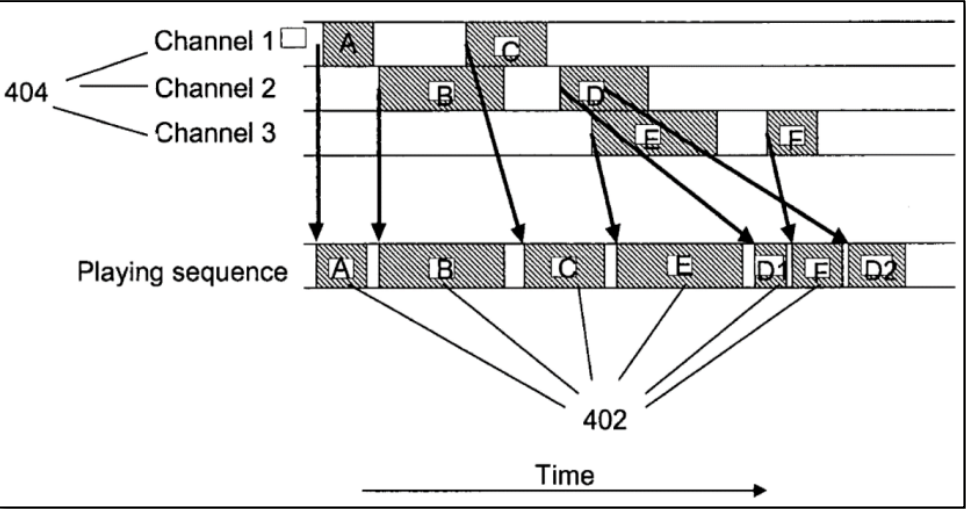
Ex. 1004 (*Ohel*), [0055]; POR at 28

76. The Petition states that a "POSITA would have understood that a queue is one well-known, practical way to store multiple messages in a single memory device such as the dynamic memory device." Petition, 41-42. While a queue is indeed one well-known way to store data, that does not make a queue suitable for all applications where data is stored. A POSITA understands *Ohel's* system provides any user the ability to *select play back* at any time, starting at any point in a message and can be provided "immediately after the user stops transmitting or upon the user's manual command." Ex. 1004, [0017], [0048], [0050], [0052]. In other words, the *user* has full control of *which messages* are played, and *when*, and *from what starting point* in a conversation which was interrupted—*Ohel's* system provides play back that is *user-selectable*.

Ex. 2007 (*Akl Decl.*) ¶ 76; POR at 28

Ohel Does Not Render *Limitation 11[F]* Obvious

- The '802 Patent determines *priority between the messages* to establish the storage queue.
- *Ohel's* prioritization system is binary; superior transmissions are played first, and *all transmissions are stored in memory.*



Ex.1001 ('802 Patent), Fig. 4; POR at 30

Q. (By Mr. Kantarek) So this says "A POSITA would understand that the disclosed method records all messages sent or received by the unit."

A. Right.

Ex. 2005 (Williams Dep. Tr.), 82:20-23; POR at 29

Ohel Does Not Render Limitation 11[F] Obvious

- Even if a POSITA did want to implement a queue storage system in *Ohel*, the Petition fails to explain how this modified version of *Ohel* would function.

78. Accordingly, a POSITA would understand that storing *Ohel*'s messages in a queue would be contrary its user-selectable play back features. Also, the Petition and Mr. Williams do not explain in what order the messages in *Ohel* would be stored into the queue. Because a queue has an order for the data stored in the queue, there must be some assignment process or rules which dictate how the data is ordered or sequenced to be stored in the queue for later use. Of course, *Ohel* provides no disclosure on any such assignment process. But the Petition does not address this issue and does not provide any suggestion of how the messages would be ordered or sequenced in the queue. Petition, 41-42. Given the user-selectable play back features of *Ohel*, it is not apparent how that assignment process would work, nor is it apparent based on the arguments in the Petition why a POSITA would use a queue with *Ohel*'s system.

Ex. 2007 (Akl Decl.) ¶ 78; POR at 29

Ground No. 2
***Nigawara* – Section 103**

Overview of Nigawara

United States Patent

[19]

Nigawara

[11] Patent Number:

4,914,705

[45] Date of Patent:

Apr. 3, 1990

[54] VOICE MESSAGE ANNOUNCING METHOD AND SYSTEM FOR PLANT

FOREIGN PATENT DOCUMENTS

[75] Inventor:

Seitsu Nigawara, Hitachi, Japan

[73] Assignee:

Hitachi, Ltd., Tokyo, Japan

[21] Appl. No.:

92,619

[22] Filed:

Sep. 3, 1987

[30] Foreign Application Priority Data

Sep. 3, 1986 [JP] Japan 61-205975

[51] Int. Cl.⁴

G10L 5/02

[52] U.S. Cl.

381/51; 340/825.51

[58] Field of Search

379/67, 88, 157, 217, 379/374; 381/51, 82

[56] References Cited

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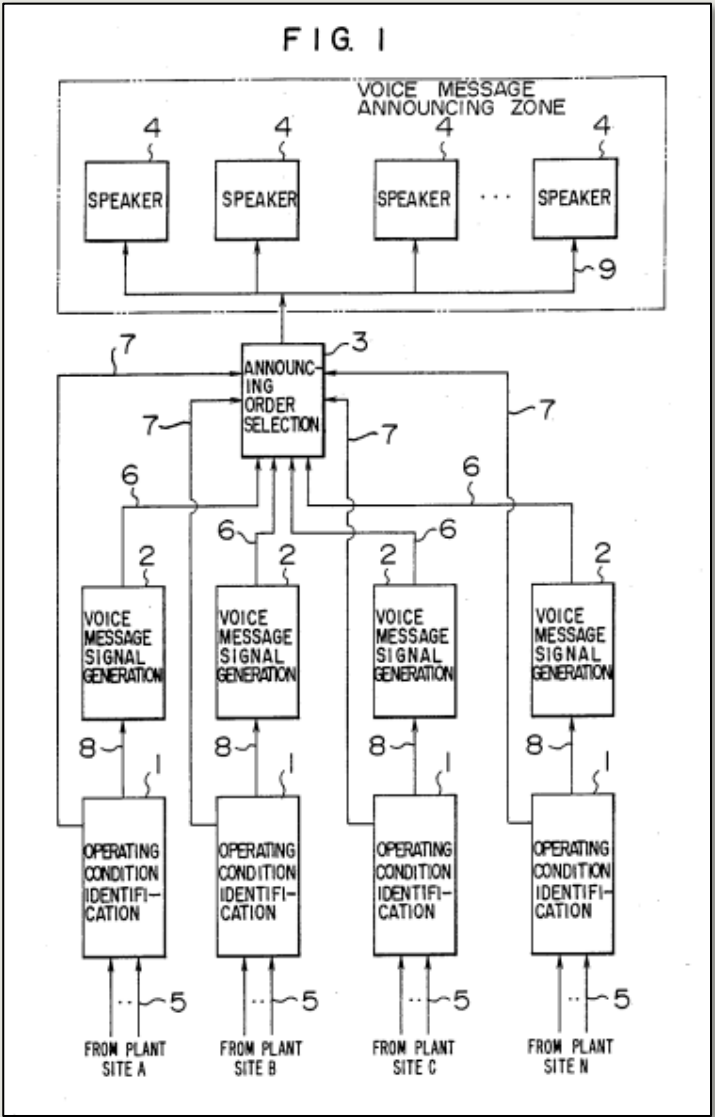
11 Claims, 4 Drawing Sheets

[57] ABSTRACT

A system for announcing operating conditions of a plant includes an identifying unit identifying plant site operating conditions on the basis of information signals indicative of the operating conditions at plant sites at the plant site, a voice message signal generating unit determining plant site operating instruction signals on the basis of the identified plant operating conditions and converting the determined instruction signals into corresponding voice message signals, a voice message signal output unit, and a voice message announcing order selection unit including a memory for temporarily storing the voice message signals, an announcing order determining unit for determining the order of announcement of the stored voice message signals, an announcing order selecting unit for sequentially applying the stored voice message signals to the message signal output unit in the determined order.

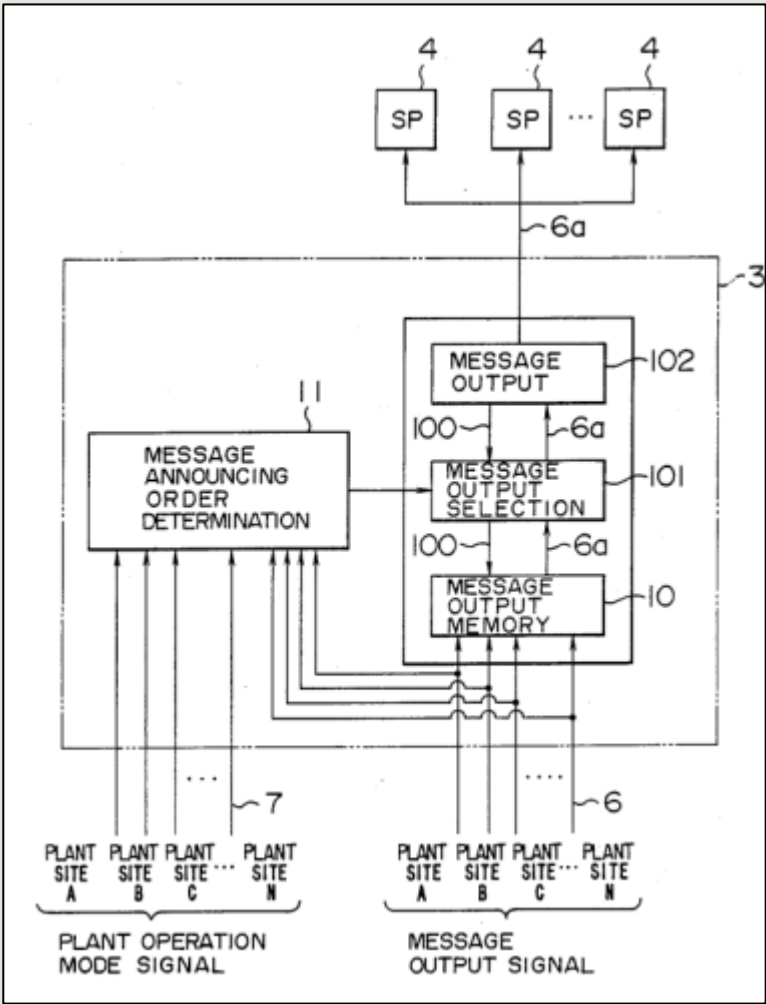
FIG. 1

Ex. 1007 (Nigawara), Cover; POR at 33-38



Ex. 1007 (Nigawara), Fig. 1; POR at 34

Overview of Nigawara



Ex. 1007 (Nigawara), Fig. 2; POR at 36

Priority order	Contents of Message
1st	Voice message announcing serious trouble in main machinery and equipments
2nd	Voice message announcing medium trouble in large auxiliary machinery and equipment
3rd	Voice message announcing a change in operating conditions of main machinery and equipment
4th	Voice message teaching actuation of automatically controlled machinery and equipment
5th	Voice message announcing slight trouble in valves and small auxiliary machinery and equipment
6th	Voice message announcing a change in operating conditions of auxiliary machinery and equipment
7th	Voice message announcing guidance for actuation of automatically controlled machinery and equipment

Ex. 1007 (Nigawara), 4:55-5:24; POR at 37

The Petition Misapplies *Nigawara's* Disclosures to Claim 1

The Petition Misapplies *Nigawara's* Disclosures to Claim 1

1. A method of managing communication in a communication system, the communication system receiving messages from a plurality of channels, the method comprising: receiving a first message on a first dedicated channel from amongst the plurality of channels at the communication system, the plurality of channels being dedicated to different entities, the first dedicated channel being dedicated to receiving messages from a first entity; receiving a second message on a second dedicated channel being dedicated to receiving messages from a second entity from amongst the plurality of channels at the communication system, the second message overlapping with the first message in time; determining one or more priorities for the first message received on the first dedicated channel from the first entity and the second message received on the second dedicated channel from the second entity based on at least one pre-defined parameter;

6. The method of claim 1, wherein determining the priority comprises assigning priorities to the first message and the second message based on inputs from a user.
7. The method of claim 1, further comprising informing an operator the time of receipt of a message while playing the first message and the second message.

Ex. 1001 ('802 Patent), Cl. 1, 6, 7

time. The receipt of multiple radio messages at one time creates confusion for an operator who needs to reply/act on each incoming radio message. To avoid this confusion, the

Ex. 1001 ('802 Patent), 1:25-27; POR at 40

receiving messages. Dispatchers 104 are the operators who handle the communication for the emergency teams and respond to emergency messages received from a plurality of users 106. Emergency communication system 102 receives

Ex. 1001 ('802 Patent), 3:59-62; POR at 40

Nigawara's Plant Sites Are Not First and Second Entities

- The Petition incorrectly identifies individual plant sites as the first and second entities of claim 1.

89. Based on the above, a POSITA would understand that Nigawara's plant sites are not different entities of the '802 Patent, and if anything, Nigawara's plant would correspond to a single entity, while plant sites and the workers in the plant sites would correspond with users within the entity that create and communicate messages with each other in operational harmony. Nigawara's problem of intermixed voice announcements across the plant affects the operators or workers in plant sites that create or receive messages, rather than an operator, as disclosed and claimed in the '802 Patent. Nigawara does not describe or suggest any person which is an operator or dispatcher of the '802 Patent. Mr. Williams admits that Nigawara does not disclose a dispatcher. Ex. 2005, 133:12-13. The Petition's argument conflates the operator of the '802 Patent with the "operator" of Nigawara, who is just a plant worker working at a plant site.

Ex. 2007 (Akl Decl.) ¶ 89; POR at 39

94. In Nigawara, the plant is a single entity. An operator of the '802 Patent that is only hearing communications from *just one entity* never has the problem of needing to *mute* a channel. The problem of the '802 Patent *only exists* when an operator is dealing with *multiple* different entities (e.g., police force, fire department, school), such that messages are received from different entities simultaneously. In Nigawara, all the users or "operators" are within a single entity, under a common operational control, in a closed communication system, where the universe of systems inputs is known so all received messages can be prioritized based on a predetermined criteria set by the entity. So Nigawara *never* faces the problem addressed in the '802 Patent, and Nigawara's solution is accordingly completely different from the solution of the '802 Patent.

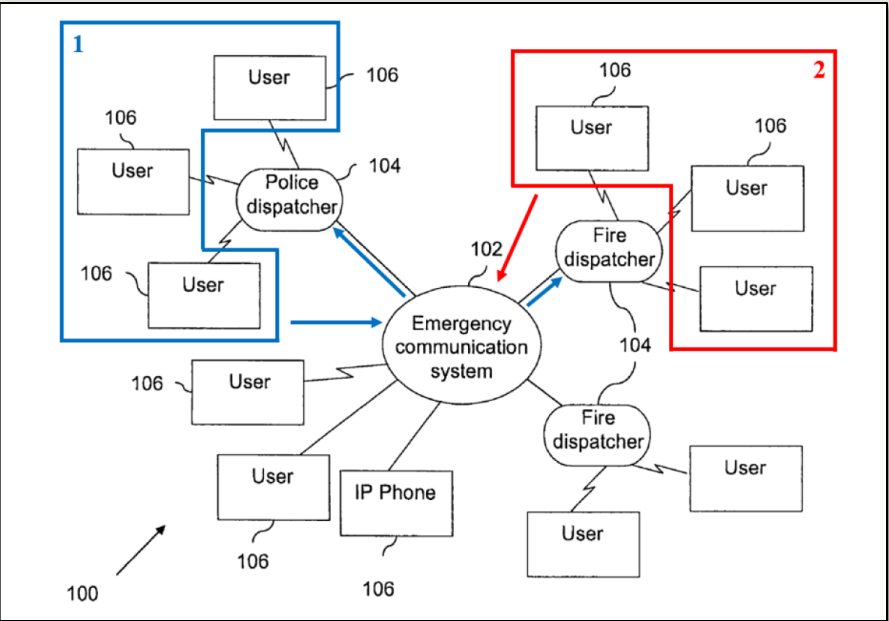
Ex. 2007 (Akl Decl.) ¶ 94; POR at 39

Nigawara's Plant Sites Are Not Entities

- The '802 Patent solves the issue of interference between multiple communications arriving to an operator sitting between two different entities.
- Nigawara concerns the mixing of prerecorded voice messages during an announcement of operating conditions at a plant.

This allocation of dedicated channels to different entities results in the possibility of multiple messages being received in the form of radio messages on different channels at one time. The receipt of multiple radio messages at one time creates confusion for an operator who needs to reply/act on each incoming radio message. To avoid this confusion, the

Ex. 1001 ('802 Patent), 1:22-27; POR at 39



Ex. 1001 ('802 Patent), Fig. 1 (annotated); POR at 18

BACKGROUND OF THE INVENTION

This invention relates to a method and system for announcing, by voice messages, the operating conditions of a plant such as a thermal power plant, or announcing a change or changes in the operating conditions of such a plant, and more particularly to an announcing method and system suitable for application to a plant where a plurality of voice message announcing devices are provided.

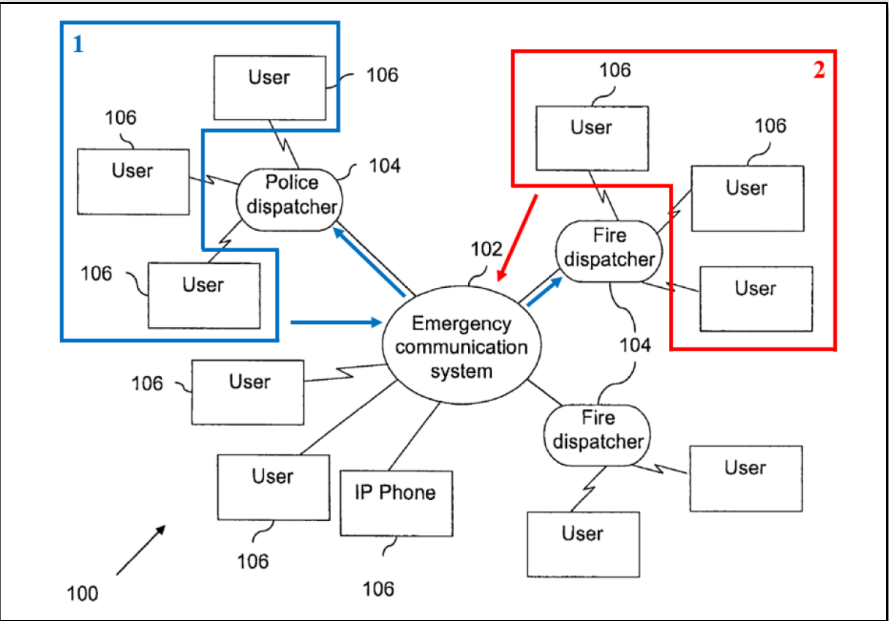
Ex. 1007 (Nigawara), 1:7-15; POR at 40

Nigawara's Plant Sites Are Not Entities

- The '802 Patent solves an issue affecting communication *between different entities*.
- Nigawara solves an issue affecting users *within an entity*.

This allocation of dedicated channels to different entities results in the possibility of multiple messages being received in the form of radio messages on different channels at one time. The receipt of multiple radio messages at one time creates confusion for an operator who needs to reply/act on each incoming radio message. To avoid this confusion, the

Ex. 1001 ('802 Patent), 1:22-27; POR at 39



Ex. 1001 ('802 Patent), Fig. 1 (annotated); POR at 18

Q. I'm simply saying that -- we talked about this before, that when voice message announcing systems operate independently, voice messages are announced simultaneously due to the absence of operational harmony among the devices; right?

A. Right.

Ex. 2005 (Williams Dep. Tr.), 125:12-16; POR at 41

Nigawara's Plant Sites Are Not Entities

- The Petition conflates users at plant sites in *Nigawara* with the operator of the '802 Patent simply because *Nigawara* uses the term “operator” as a plant worker.

89. Based on the above, a POSITA would understand that Nigawara's plant sites are not different entities of the '802 Patent, and if anything, Nigawara's plant sites would correspond to a single entity, while plant sites and the workers in the plant sites would correspond with users within the entity that create and communicate messages with each other in operational harmony. Nigawara's problem of intermixed voice announcements across the plant affects the operators or workers in plant sites that create or receive messages, rather than an operator, as disclosed and claimed in the '802 Patent. Nigawara does not describe or suggest any person which is an operator or dispatcher of the '802 Patent. Mr. Williams admits that Nigawara does not disclose a dispatcher. Ex. 2005, 133:12-13. The Petition's argument conflates the operator of the '802 Patent with the “operator” of Nigawara, who is just a plant worker working at a plant site.

Ex. 2007 (Akl Decl.) ¶ 89; POR at 39-40

91. Regardless, the management of Nigawara's messages with the plant does *not* present the problems addressed in the '802 Patent, where the operator receives incoming messages from different entities. The differences between open communication systems and closed communication systems help illustrate key distinctions. In a closed system, the predetermined set of rules can be set by the entity, so all users in the entity operate under common operational control. This contrasts with the situation an operator faces, where two entities have different operational rules that may clash with each other and take no account of any other entities' rules or procedures—operating in an absence of operational harmony.

Ex. 2007 (Akl Decl.) ¶ 91; POR at 39-40

Nigawara's Plant Sites Are Not Entities

- Mr. Williams agrees that a “single unit” is distinct from multiple “different units.”

Q. I'm simply saying that -- we talked about this before, that when voice message announcing systems operate independently, voice messages are announced simultaneously due to the absence of operational harmony among the devices; right?

A. Right.

Ex. 2005 (Williams Dep. Tr.), 125:12-16; POR at 41

A. It depends on how you look at it. Obviously both involve emergency services, but this is about -- this particular patent, if I recall correctly, was about the responding of a -- you know, a four-alarm fire and you are getting people who were coming from all sorts of different units, not just a single unit but units across town or even visiting people from out of state and police and EMTs and all sorts of other things.

Ex. 2005 (Williams Dep. Tr.), 35:11-18; POR at 41

Nigawara's Plant Sites Are Not Entities

- Dr. Akl agrees that a “single unit” is distinct from multiple “different units.”

93. In these scenarios, the operator of the '802 Patent must decide whether to mute channels or deal with the confusion caused by the overlapping messages from different entities, which cannot hear each other. Ex. 1001, 1:22-36. The reason for this problem, as confirmed by Mr. Williams, is “when voice message announcing systems operate independently, voice messages are announced simultaneously due to the *absence of operational harmony* among the devices.” Ex. 2005, 125:12-16. This problem occurs in open systems, but this is avoidable or not a problem in closed systems, where users operate with common operational control and all possible system inputs can be known and able to be suitably handled, as dictated by the entity dictating operational control.

Ex. 2007 (Akl Decl.) ¶ 93; POR at 41

94. In Nigawara, the plant is a single entity. An operator of the '802 Patent that is only hearing communications from *just one entity* never has the problem of needing to *mute* a channel. The problem of the '802 Patent *only exists* when an operator is dealing with *multiple* different entities (e.g., police force, fire department, school), such that messages are received from different entities simultaneously. In Nigawara, all the users or “operators” are within a single entity, under a common operational control, in a closed communication system, where the universe of systems inputs is known so all received messages can be prioritized based on a predetermined criteria set by the entity. So Nigawara *never* faces the problem addressed in the '802 Patent, and Nigawara's solution is accordingly completely different from the solution of the '802 Patent.

Ex. 2007 (Akl Decl.) ¶ 94; POR at 42

Nigawara Stores All Messages When Received Regardless of Priority

- Limitation 1[D] of the '802 Patent determines messages to store *based on priorities assigned*.

determining which message out of the first message and the second message should be stored and subsequently played **based on** the second message overlapping with the first message in time and **one or more priorities assigned to the first and the second message;**

Ex. 1001 ('802 Patent), Cl. 1; POR at 43; Sur-Reply at 13-14

- *Nigawara stores all messages when received without a priority assignment.*

FIG. 1 is a block diagram showing the structure of a preferred embodiment of the automatic voice message announcing system of the present invention.

The rule for determination of the priority order by the message announcing order determination unit 11 will now be described. **Voice messages are classified into those having a higher degree of importance and those having a lower degree of importance depending on their contents.** A serious problem, such as a problem

Q. Where in the paragraph does it talk about storing the message having the higher priority?

A. Well, **in Nigawara all messages incoming of -- before they are prioritized are essentially buffered or stored, and then they go through a priority determination process.**

Ex. 2005 (Williams Dep. Tr.), 148:19-24; POR at 43

Ex. 1007 (Nigawara), 3:68-4:2, 4:39-44; POR at 43; Sur-Reply at 13-14

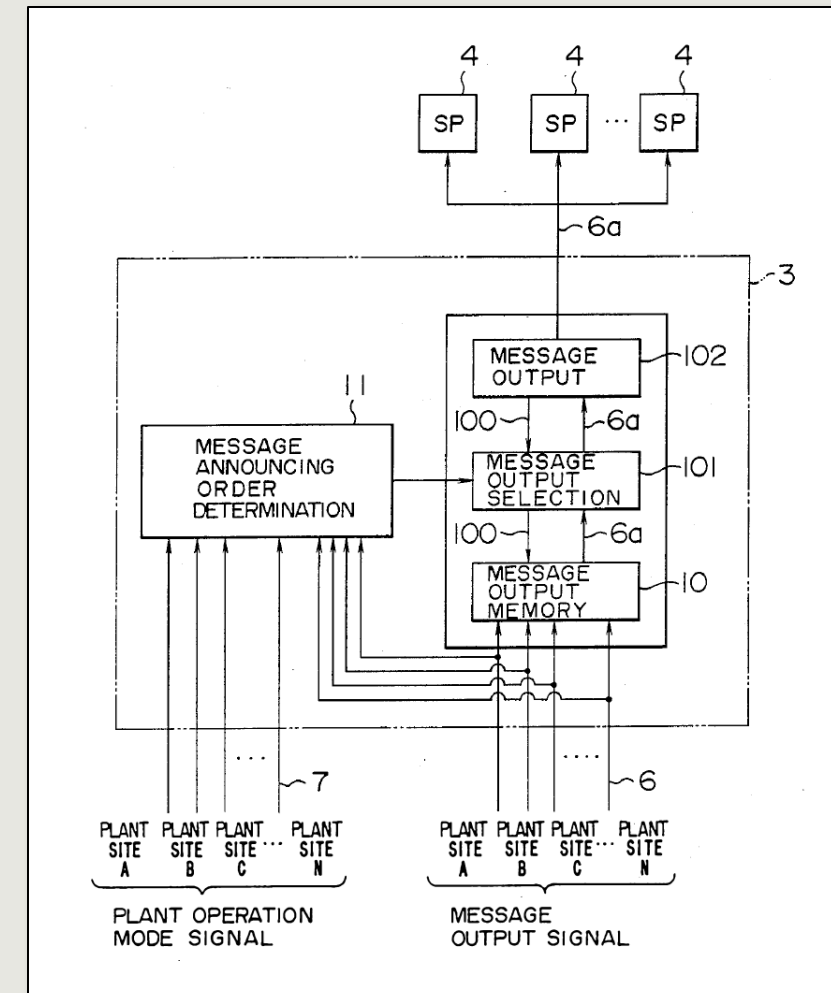
Nigawara Stores All Messages When Received Regardless of Priority

- *Nigawara* discloses the *opposite* of claim 1.

FIG. 2 is a block diagram illustrating the function of the message announcing order selection unit 3 shown in FIG. 1. Voice message output signals 6 from the voice message signal generating units 2 of the individual plants are stored in a voice message signal memory 10. The voice message signals 6 are also applied, together with the plant operation mode information signals 7, to a message announcing order determination unit 11.

transmission of voice message signals. In response to this transmission permission signal 100, the message signal selection unit 101 selects from the voice message signal memory 10 the voice message signal 6a having the highest priority among those stored in the memory 10 and applies the selected signal 6a to the message output unit 102. Such operation is repeated. When,

Ex. 1007 (Nigawara), 3:66-4:5, 4:24-30; POR at 43-44



Ex. 1007 (Nigawara), Fig. 2; POR at 36

Nigawara Stores All Messages When Received Regardless of Priority

- Limitation 1[D] requires determining which messages should be stored after the priorities are assigned to each message.

- The Board did not address this limitation.
- Petitioner's evidence cited in related district court litigation supports this position.

108. Additionally, the Institution Decision of the present proceeding refers to a similar issue to the timing of element 1[d] as discussed above, in relation to the scope of element 1[f]. Paper 11, 9-12. The Board states that “storing...is broad enough to encompass continuing to store a message...” where that message has lower priority than another message and “claim language also does not appear to otherwise specify that the message is not to be stored until its priority is assigned.” Paper 11, 11. These comments do not conflict with the required ordering in relation to determination in element 1[d] as explained above, since storing may indeed be an ongoing process, but the determination of element 1[d] is a discrete one-time occurrence which is limited to the instant in time in which it occurs, not an ongoing process. And the discrete occurrence of element 1[d], must occur after a discrete occurrence of element 1[c], and before the storing of element 1[f]. Nigawara fails to teach this, as explained below. Notably, the Board did not address the scope of

Ex. 2007 (Akl Decl.) ¶ 108; POR 43-49

Nigawara Stores All Messages When Received Regardless of Priority

- The '802 Patent storage is based on a priority calculation that *Nigawara* never performs.

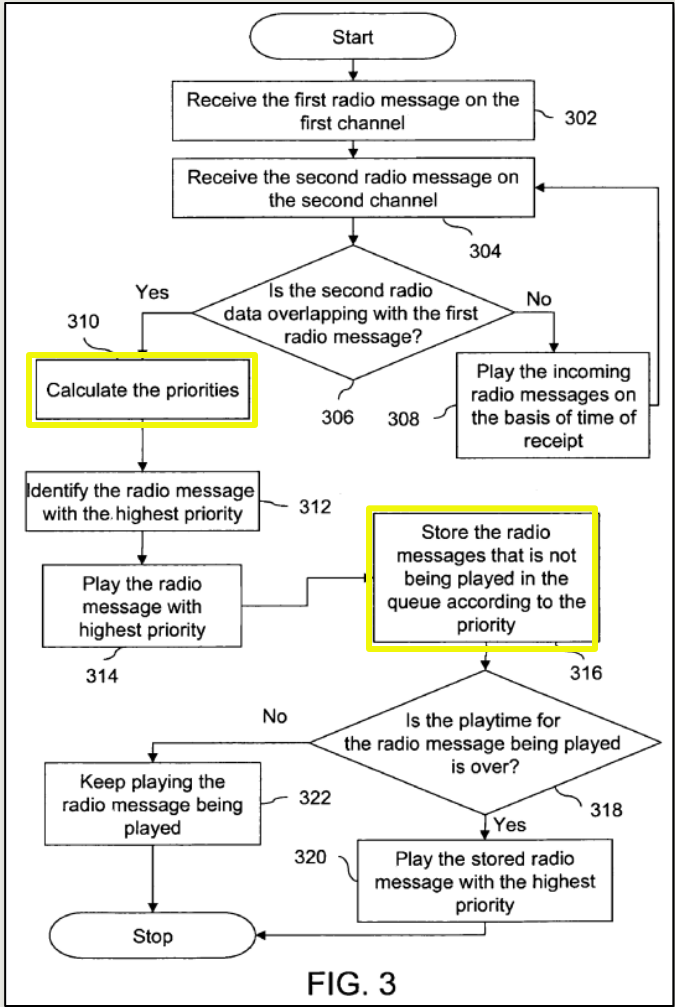


FIG. 3 illustrates a flowchart depicting a detailed method for managing communication in emergency communication system 102, in accordance with an embodiment of the invention. At step 302, emergency communication system

However, in case overlapping is identified at step 306, step 310 is performed. At step 310, a priority is calculated for each of the incoming radio messages. In accordance with an embodiment of the invention, the priority can be calculated by using at least one pre-defined parameter. The pre-defined parameter can be, for example, the type of radio messages, the size of the radio messages, the bandwidth requirement, the channel from which radio messages are received, or any possible combination thereof. At step 312, a check is performed to identify the radio message with the highest priority. The radio message with the highest priority is played at step 314 while the remaining radio messages are stored in a queue at step 316. The storage is based on the priority calculated at step 310.

Ex. 1001 ('802 Patent), Fig. 3, 4:41-44, 4:54-67; POR at 45

Nigawara Stores All Messages When Received Regardless of Priority

- The '802 Patent specification supports PO's position.

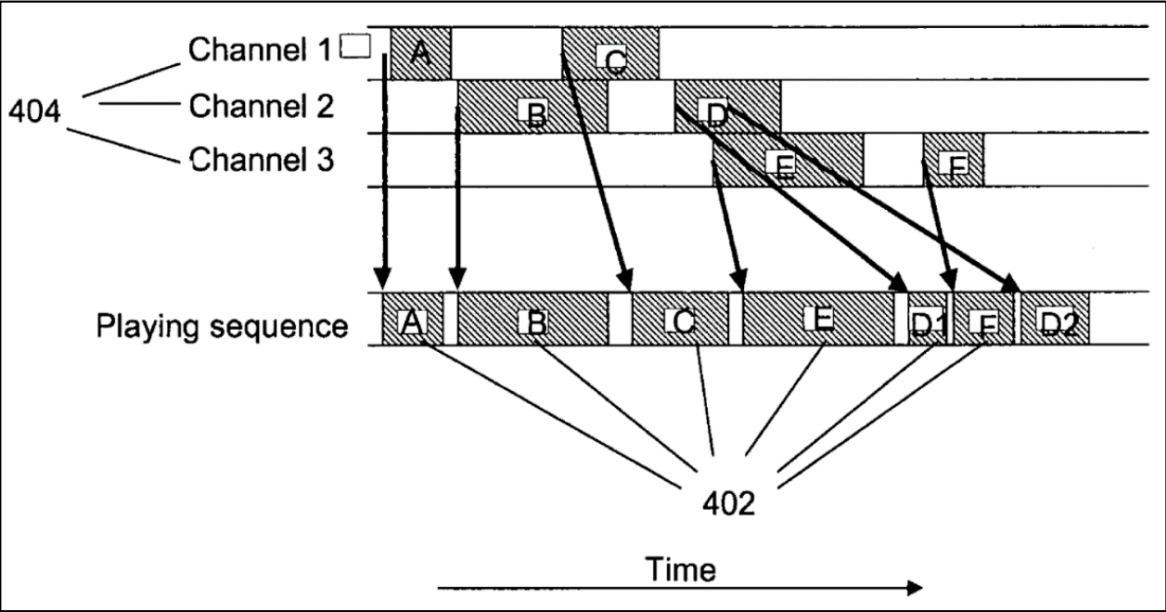


FIG. 4 illustrates a working example of communication by using emergency communication system 102, in accordance with an embodiment of the invention. In accordance

Ex. 1001 ('802 Patent), Fig. 4, 5:19-21; POR at 45-46

In accordance with an embodiment of the invention, radio message A is played as soon as it is received on channel 1. Thereafter, radio message B is played since it does not overlap in time with radio message A. While radio message B is being played, radio message C is received. After computation and comparison of the priorities of B and C, it is found that the priority of radio message B is higher. Hence, radio message C is stored in the queue. At this point of time, radio message C is the only radio message in the queue. As soon as radio message B is completed, radio message C is played. While radio message C is being played, radio messages D and E are received. Radio messages D and E are lower in priority than radio message C, so they are stored in the queue, based on the priority. In accordance with an embodiment of the invention, the priority of radio message E is higher than that of radio message D, and hence, is stored accordingly in the queue. As soon as radio message C is completed, stored radio message E is played, since it is highest in priority among the stored radio messages. Radio message D is still in the queue. As soon as radio message E is completed, stored radio message D is played. However, while playing radio message D, radio message F is received. Radio message F is found to be higher in priority than radio message D, which is being played. Therefore, the playing of radio message D is terminated after a portion of D, i.e., D1, has been played and radio message F is played. The part of the radio message D that could not be played, i.e., D2, is resumed after the completion of the playing of radio message F. In accordance with an embodiment of the invention, a user is informed about the time of receipt of a radio message, while playing the radio message.

Ex. 1001 ('802 Patent), 5:34-64; POR at 45

Nigawara Stores All Messages When Received Regardless of Priority

- The prosecution history support's PO's position.

102. Regarding the prosecution history, I found nothing that changed the plain reading of the claim language. But the Patent Owner did argue over the Cheng reference in a way which is applicable to the Nigawara reference, stating that the “determining” feature was not found in Cheng because “messages are always stored in Cheng.” Ex. 1003, 62. So Cheng’s system *always* stores messages, which is like Nigawara’s system which *stores all messages when received*, regardless of their priority; and this feature was argued to distinguish over Cheng, highlighting the difference between a system which always stores messages without the claimed determinations prior to storing the lower priority message.

Ex. 2007 (Akl Decl.) ¶ 102; POR at 46

Also, in Cheng, there is no disclosure that the messages received overlap in time. In Cheng, emergency calls are received and stored in a waiting buffer. The user then disconnects and waits for the emergency call center to call back. Cheng does not disclose or suggest that these calls overlap. Cheng stores information in all calls in a first in-first out buffer. Then, calls are stored in buffers 36n based on a priority. Cheng does not disclose or suggest determining which message should be stored and played subsequent based on the second message overlapping with the first message in time and a priority assigned each of the first and the second message. Rather, messages are always stored in Cheng and Cheng does not disclose or suggest making the determination based on an overlap in time. The messages are first stored in the FIFO and then stored in buffers 36n based on a priority desired. Because the users in Cheng hang up and are called back, it would not have been obvious to make the above determination because Cheng may not expect overlap. Even if overlap did exist (Cheng does not disclose this however), the above determination is not made in Cheng because the messages are always stored and then moved to a priority buffer. Thus, the combination of Cheng and Uchida may store messages or pages but this storing is not performed based on any determination that the messages or pages overlap in time or the priority of the messages or pages.

Ex. 1003 ('802 Patent FH), 62; POR at 46

Nigawara Stores All Messages When Received Regardless of Priority

- In parallel proceedings, the parties previously agreed that the determining steps must occur before the storing step.

Exhibit B – Joint Claim Construction Chart			
'802 Patent Claim Term	Motorola's Proposed Construction	STA's Proposed Construction	Court's Construction
Order of steps (Claim 1) A method of managing communication in a communication system, the communication system receiving messages from a plurality of channels, the method comprising:	The "receiving" and "determining" steps must occur before the "storing at least one message..." step, and the "storing at least one message..." step must occur before the "playing the stored message" step. AGREED.	The "receiving" and "determining" steps must occur before the "storing at least one message..." step, and the "storing at least one message..." step must occur before the "playing the stored message" step. AGREED.	
receiving a first message on a first dedicated channel from amongst the plurality of channels at the communication system, the plurality of channels being dedicated to different entities, the first dedicated channel being dedicated to receiving messages from a first entity; receiving a second message on a second dedicated channel being dedicated to receiving messages from a second entity from amongst the plurality of channels at the communication system, the second message overlapping with the first message in time; determining one or more priorities for the first message received on	The remaining steps must be performed in the recited order.	Plain and ordinary meaning.	

Nigawara Stores All Messages When Received Regardless of Priority

- Dr. Akl agrees with Mr. Williams that *Nigawara* stores all messages received regardless of priority.

114. In summary, Nigawara's relied upon process does *not* perform the "determining" of element 1[d], and certainly does not perform element 1[d] before the "storing" of element 1[f]. Thus, Nigawara's process, which starts with storing all received messages regardless of their priority, *violates the required ordering of claim element 1[d]*, and cannot be considered as teaching the claimed method with required order of element 1[d] in relation to elements 1[c] and 1[f] as discussed above. For at least the above explained reasons, Nigawara's process fails to teach or suggest to a POSITA the ordered elements 1[c], 1[d], and 1[f] of claim 1.

Ex. 2007 (Akl Decl.) ¶ 114; POR at 47

The Petition Fails to Consistently Identify a First Message and a Second Message

- Claim 1, Limitations 1[a] and 1[b] require a first and second message.
- The Petition inconsistently and improperly relies on different features for the claimed first message of element 1[a] and the first message of elements 1[c] and 1[d].

b. 1[a]

Nigawara discloses, or at least renders obvious, “receiving a first message [e.g., information signals 5] on a first dedicated channel [e.g., communication link to units 1 and 2 provided for plant site A] from amongst the plurality of channels at the communication system [e.g., all units 1 and 2], the plurality of channels being dedicated to different entities [e.g., units 1 and 2 provided for plant sites B, C, ... , N], the first dedicated channel being dedicated to receiving messages from a first

c. 1[b]

Nigawara discloses “receiving a second message [e.g., information signals 5] on a second dedicated channel being dedicated to receiving messages from a second entity from amongst the plurality of channels at the communication system, the second message overlapping [e.g., plural demands for voice message announcement] with the first message in time [e.g., plant site B].”

Pet. at 56, 59; POR at 48-50

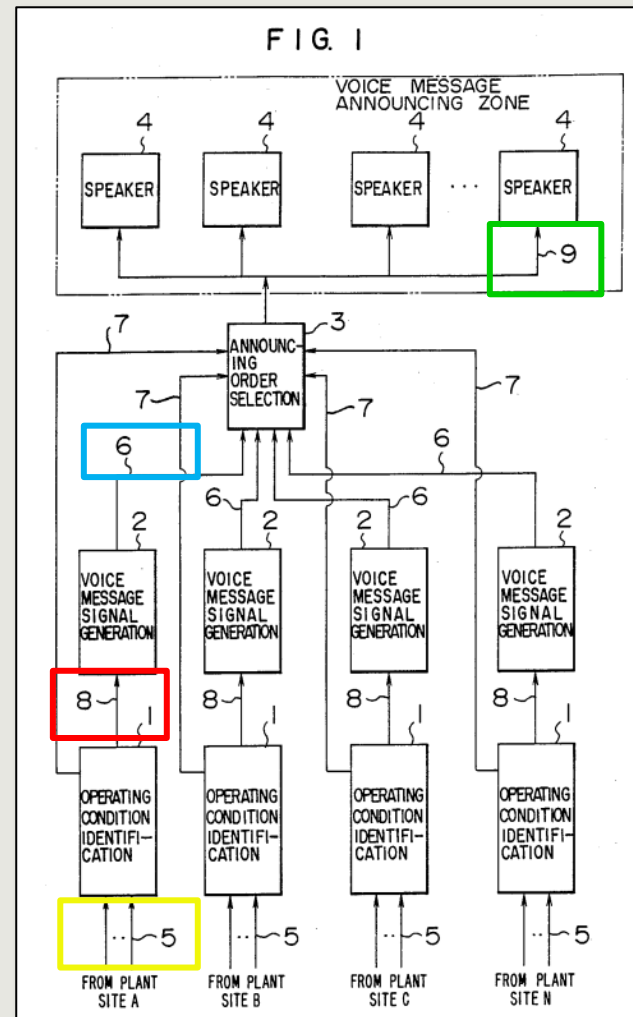
Nigawara discloses that “[w]hen a plurality of demands for announcement of voice messages exist simultaneously [*the first and second messages*], the message announcing order selection unit 3 **determines the priority** order of announcement of the voice messages” based on the type of message output signals and plant operation mode signals (*pre-defined parameters*). Ex[1007], 3:33-39, Tables 1-2; Ex[1002], ¶¶245-246.

“[W]hen plural, for example, two, voice message signals 6 are simultaneously applied, the priority order and the type of voice message signals 6” and “the plant operation mode information signals 7” are used “to classify them into a first message signal and a second message signal **according to the predetermined priority order.**” Ex[1007], 6:36-42; Ex[1002], ¶¶247-249.

Petition at 62; POR at 48-50

The Petition Fails to Consistently Identify a First Message and a Second Message

- Petitioner does not explain how **Information Signals 5**, **Voice Message Announcement Instruction Signals 8**, **Voice Message Signals 6**, and **Unknown Item 9** are the same message.



Ex. 1007 (Nigawara), Fig. 1; POR at 48-50

***Nigawara* Does Not Prioritize Messages Based on a Type of Received Message**

Nigawara Does Not Prioritize Messages Based on a Type of Received Message

- **Nigawara fails to render claim 5 obvious because its system prioritizes based on message content without considering the type of received messages, as required by the '802 Patent.**

determining one or more priorities for the first message received on the first dedicated channel from the first entity and the second message received on the second dedicated channel from the second entity based on at least one pre-defined parameter;

4. The method of claim 1, wherein the predefined parameter comprises a type of the received messages.

5. The method of claim 4, wherein the type of received messages being one of a group comprising audio, video, text, and image.

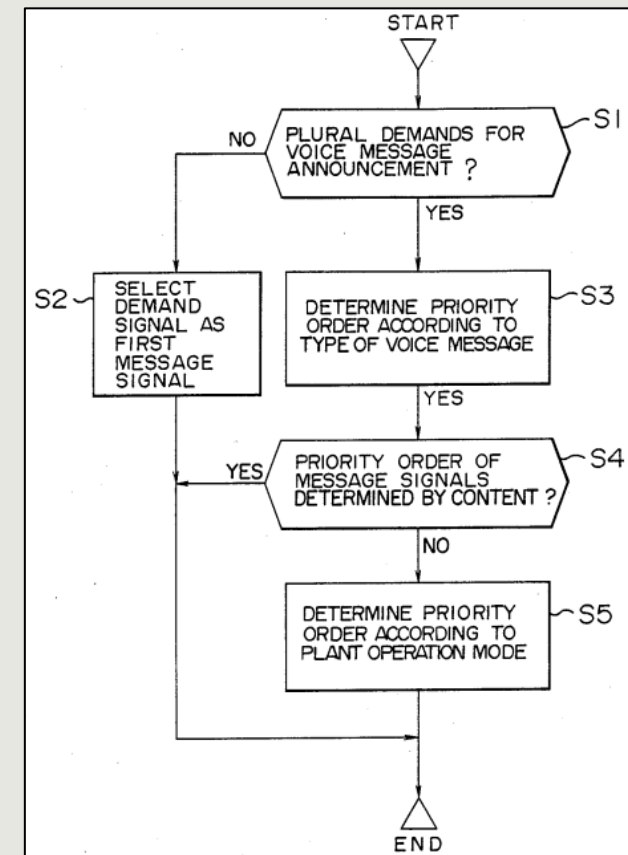
Ex. 1001 ('802 Patent) Cls 1, 4-5; POR at 50-51

Nigawara Does Not Prioritize Messages Based on a Type of Received Message

- ***Nigawara's system determines priority based on the message's content and relative importance—not based on whether a signal is an audio or video signal.***

According to the present invention which attains the above object, the priority order of announcement of voice message signals generated from a plurality of independent voice message announcing devices is determined according to their importance, and the messages are serially announced according to the determined priority order.

announcing order selection unit 3. When a plurality of demands for announcement of voice messages exist simultaneously, the message announcing order selection unit 3 determines the priority order of announcement of the voice messages according to the contents of the messages and the relative importance of various pieces of information described below, and the voice messages are announced from speakers 4 according to the priority order. Plant operation mode information signals 7 are



Nigawara Does Not Prioritize Messages Based on a Type of Received Message

- Table 1 explicitly discloses “determination of priority order according to contents of *voice messages*”

message. When such a procedure is followed, the priority order of announcement of voice messages can be determined depending on the contents of the messages as, for example, tabulated in Table 1.

TABLE 1

Example of determination of priority order according to contents of voice messages (type of message output signals 6)	
Priority order	Contents of Message
1st	Voice message announcing serious trouble in main machinery and equipments
2nd	Voice message announcing medium trouble in large auxiliary machinery and equipment

- | | |
|-----|---|
| 2nd | Voice message announcing medium trouble in large auxiliary machinery and equipment |
| 3rd | Voice message announcing a change in operating conditions of main machinery and equipment |
| 4th | Voice message teaching actuation of automatically controlled machinery and equipment |
| 5th | Voice message announcing slight trouble in valves and small auxiliary machinery and equipment |
| 6th | Voice message announcing a change in operating conditions of auxiliary machinery and equipment |
| 7th | Voice message announcing guidance for actuation of automatically controlled machinery and equipment |

***Nigawara* Does Not Inform an Operator of a Time of Receipt**

Nigawara Does Not Inform an Operator of a Time of Receipt

- **Nigawara's "operators" are not the operators or dispatchers of the '802 Patent.**

7. The method of claim 1, further comprising informing an operator the time of receipt of a message while playing the first message and the second message.

time. The receipt of multiple radio messages at one time creates confusion for an operator who needs to reply/act on each incoming radio message. To avoid this confusion, the

receiving messages. Dispatchers 104 are the operators who handle the communication for the emergency teams and respond to emergency messages received from a plurality of users 106. Emergency communication system 102 receives

Ex. 1001 ('802 Patent) Cl. 7, 1:25-27, 3:59-62; POR at 52

- **If anything, Nigawara's "operators" would be *users* of the '802 Patent.**

89. Based on the above, a POSITA would understand that Nigawara's plant sites are not different entities of the '802 Patent, and if anything, Nigawara's plant would correspond to a single entity, while plant sites and the workers in the plant sites would correspond with users within the entity that create and communicate messages with each other in operational harmony. Nigawara's problem of

Ex. 2007 (Akl Decl.) ¶ 89; POR at 52

***Nigawara* Does Not Inform an Operator of a Time of Receipt**

- **Petitioner's own expert admits that *Nigawara* does not have an operator, as claimed in the '802 Patent.**

Q. Does Nigawara disclose a dispatcher?

A. No.

Ex. 2005 (Williams Dep. Tr.), 133:12-13; POR at 52

receiving messages. Dispatchers 104 are the operators who handle the communication for the emergency teams and respond to emergency messages received from a plurality of users 106. Emergency communication system 102 receives

Ex. 1001 ('802 Patent), 3:59-62; POR 52-53

Nigawara Does Not Inform an Operator of a Time of Receipt

- **Nigawara's system has no need for a dispatcher or operator as claimed in the '802 Patent.**

A. I -- the parts that I said was dispatchers would experience over -- receiving overlapping messages and that is a problem, and the '802 purports to solve or at least address in some form that issue. So if you combine the two together, then potentially, a dispatcher could be a beneficiary of the '802 assuming it actually, you know, does what it's supposed to do and et cetera, et cetera.

Q. Does Nigawara disclose a dispatcher?

A. No.

Ex. 2005 (Williams Dep. Tr.), 41:15-22, 133:12-13; POR at 52

***Nigawara* Does Not Teach All Elements of Independent Claim 11**

The Petition Fails to Address Element 11[H]

- The Petition fails to address element 11[H]—“playing the stored messages having the highest priority.”

11. A method of managing communication in a communication system, the communication system receiving messages from a plurality of channels, the method comprising: receiving a first message on a first dedicated channel from amongst the plurality of channels at communication system, the plurality of channels being dedicated to different entities, the first dedicated channel being dedicated to receiving messages from a first entity; receiving a second message on a second dedicated channel being dedicated to receiving messages from a second entity at the communication system, the second message overlapping with the first message in time; prioritizing the first and second messages based on at least one predefined parameter; determining which message of the first message and the second message should be stored and subsequently played based on the second message overlapping with the first message in time and one or more priorities assigned to the first and the second message; playing the message having the highest priority; storing the message having lower priority in a queue on the basis of the determination and the prioritization; checking periodically the status of the message being played; and playing the stored message having the highest priority.

A. 1G versus 11H; right?

Q. Yeah. Are elements 11H and 1G the same?

A. No, not exactly the same.

Ex. 2005 (Williams Dep. Tr.), 103:3-5; POR at 54

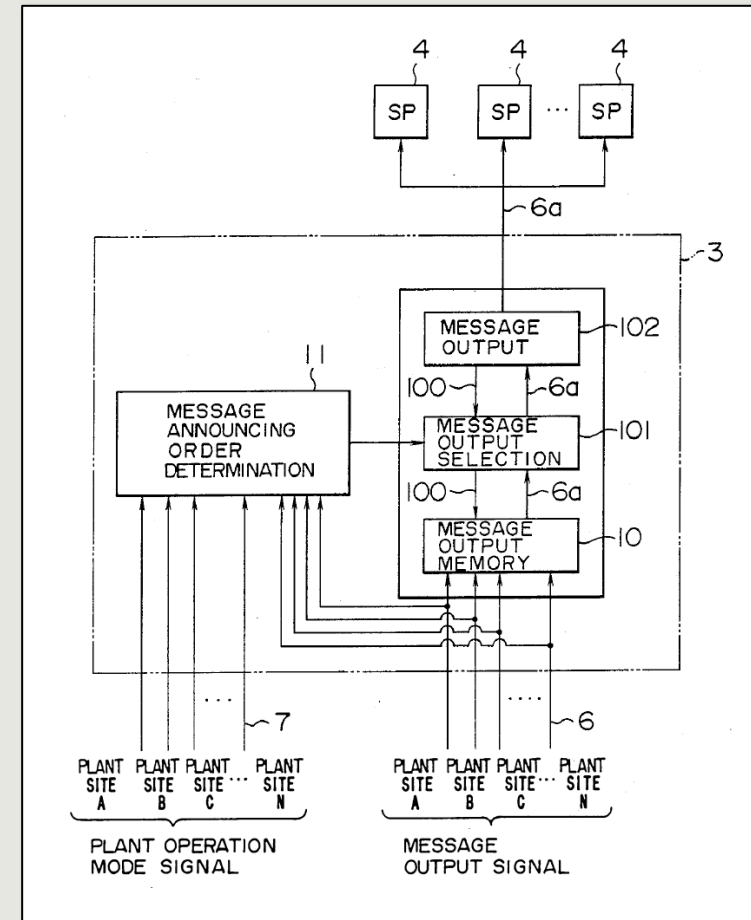
Ex. 1001 ('802 Patent), Cl. 11; POR at 53-54; Sur-Reply at 14-15

Nigawara Does Not Store Messages in a Queue Based on Priority

- **Nigawara** does not store messages “in a queue on the basis of the determination and the prioritization,” which fails to render claim 11 obvious.

FIG. 2 is a block diagram illustrating the function of the message announcing order selection unit 3 shown in FIG. 1. Voice message output signals 6 from the voice message signal generating units 2 of the individual plants are stored in a voice message signal memory 10. The voice message signals 6 are also applied, together with the plant operation mode information signals 7, to a message announcing order determination unit 11.

Ex. 1007 (Nigawara), 3:66-4:5; POR at 54



Ex. 1007 (Nigawara), Fig. 2; POR 54-56

Nigawara Does Not Store Messages in a Queue Based on Priority

- **Nigawara stores all messages, then receives a signal, then identifies and plays the higher priority message.**

119. A POSITA understands that after a message finishes playing, Nigawara's message announcing order determination unit 11, *reassesses* priority order and selects the highest priority message to play back when a message finished "at the end of announcement of the first message signal." Ex. 1007, 6:54-58, Fig.

3. In this context, a POSITA understands that the messages received could be stored in *any order* in the memory 10, but still played back in the order of priority, *without being stored in a queue*.

Ex. 2007 (Akl Decl.) ¶ 119; POR at 56

120. A POSITA would understand that Nigawara's described process and structure, with immediately storing the messages upon receipt and prior to prioritization, and with selecting the highest priority message at the end of a message playing, does *not* teach storing messages in a queue. The Petition and Mr. Williams do not explain why Nigawara would *take extra computational steps, e.g., reordering any messages stored in memory* 10, when the system as described already selects the highest priority message for announcement after each played message, and does not explain what would be beneficial about changing Nigawara's existing system.

Ex. 2007 (Akl Decl.) ¶ 120; POR at 56

Nigawara Does Not “Periodically Check the Status of the Message Being Played”

- Petitioner’s citation to Nigawara does not disclose this element.

speaker 4. At the end of announcement of the first message signal, the message announcing order determination unit 11 may have received one or more voice message signals 6, and the priority order is determined again according to the flow shown in FIG. 3. Therefore,

Ex. 1007 (Nigawara), 6:54-58 (cited by Pet. at 80); POR at 57

- Should Petitioners rely on inherently disclosure, this standard is not met.

Q. (By Mr. Kantarek) I'm saying the content is known before the system announces them; right?

A. The priority of -- based on the content is known and the content has been recorded. So --

Q. So it's a recording. It's not people communicating back and forth; right?

A. Right. But no one has heard the message

Ex. 2005 (Williams Dep. Tr.), 143:19-25; POR at 57

Nigawara Does Not “Periodically Check the Status of the Message Being Played”

- **Nigawara’s system is playing pre-recorded messages.**

122. As explained above, a POSITA understands that *after* a message finishes playing, Nigawara’s message announcing order determination unit 11, *reassesses* priority order and selects the highest priority message to play back when a message finished “*at the end* of announcement of the first message signal.” Ex. 1007, 6:54-58, Fig. 3; *supra* sec. X.E.1. In Nigawara, being a closed system with *prerecorded* messages, the message lengths are known, which is what allows for Nigawara’s system to *reassess* the priority order “*at the end*” of a played message. Ex. 1007, 3:22-28, 6:54-58. A POSITA understands that there is no need in Nigawara’s system to periodically check whether a prerecorded message is completed, since the run time of the message would be known. The Petition provides no reason why periodic checking would occur when it is unnecessary to know whether the message has completed or not. Petition, 80-81. In my opinion, Nigawara does not disclose or suggest periodically checking the status of a message being played as required by claim 11.

Ex. 2007 (Akl Decl.) ¶ 122; POR at 57-59

Mr. Williams Fails to Represent *Ohel's* and *Nigawara's* Disclosures Accurately

- **Mr. Williams has a history of improperly picking and choosing teachings from a reference and failing to represent accurately what it fairly suggests to a POSITA.**

Mr. Williams's testimony improperly picks and chooses teachings from Liu and fails to represent accurately what Liu fairly suggests to a skilled artisan. We are mindful that, when evaluating claims for obviousness, "the prior art as a whole must be considered." *In re Hedges*, 783 F.2d 1038, 1041 (Fed. Cir. 1986); *see also In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986) (explaining that a reference "must be read, not in isolation, but for what it fairly teaches in combination with the prior art as a whole"). "It is impermissible within the framework of section 103 to

Ex. 2006, 25, POR at 60

The problem with Mr. Williams's testimony is that it completely ignores the information that Liu's method does need to initiate a communication. Mr. Williams gives us no basis to evaluate whether there is a *reduction* in the amount of information needed. We note, however, that

Ex. 2006, 27; POR at 60

Mr. Williams Fails to Represent *Ohel's* and *Nigawara's* Disclosures Accurately

- Mr. Williams never investigated whether his methodologies are appropriate at all.

Q. (By Mr. Kantarek) So if -- if the PTAB has ever found your opinions improperly pick and choose teachings from a reference, you don't know about that?

A. Correct.

Q. If the PTAB has ever found your opinions failed to represent accurately what a reference fairly suggests to a skilled artisan, you wouldn't know anything about that?

MR. STAVINOKHA: Objection. Relevance outside the scope.

A. I would not know. I don't know.

Ex. 2005 (Williams Dep. Tr.), 29:2-18; POR at 59

