

ABSTRACT

A transmission management apparatus manages transmission states of a plurality of transmission terminals including a first transmission terminal and a second transmission terminal. The apparatus includes a terminal management table storage unit configured to store therein a terminal management table in which terminal information including an identifier and an identification name of each transmission terminal is managed; a receiving unit configured to receive a terminal information request signal from the first transmission terminal, the terminal information request signal indicating a request for information for identifying the second transmission terminal, the first and second transmission terminals being in transmission therebetween; a terminal state acquisition unit configured to acquire the information for identifying the second transmission terminal from the terminal management table in response to the terminal information request signal; and a transmitting unit configured to transmit the information acquired by the terminal state acquisition unit to the first transmission terminal.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	530808US
		Application Number	New Application
Title of Invention	TRANSMISSION MANAGEMENT APPARATUS		

The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76. This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.

Secrecy Order 37 CFR 5.2

☐ Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)

Inventor Information:

Inventor 1

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Yoshinaga		KATO	

Residence Information

Non US Residency

City	Kanagawa	Country of Residence	Japan
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Mailing Address of Inventor:

Address 1	c/o RICOH COMPANY, LIMITED		
Address 2	3-6, Nakamagome 1-chome, Ohta-ku		
City	Tokyo	State/Province	
Postal Code	143-8555	Country	Japan

Inventor 2

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Taro		OKUYAMA	

Residence Information

Non US Residency

City	Tokyo	Country of Residence	Japan
------	-------	----------------------	-------

Mailing Address of Inventor:

Address 1	c/o RICOH COMPANY, LIMITED		
Address 2	3-6, Nakamagome 1-chome, Ohta-ku		
City	Tokyo	State/Province	
Postal Code	143-8555	Country	Japan

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	530808US
		Application Number	New Application
Title of Invention	TRANSMISSION MANAGEMENT APPARATUS		

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below.
For further information see 37 CFR 1.33(a).

☐ An Address is being provided for the correspondence information of this application.

Customer Number	22850
Email Address	oblonpat@oblon.com

Application Information:

Title of the Invention	TRANSMISSION MANAGEMENT APPARATUS		
Attorney Docket Number	530808US	Small Entity Status Claimed	☐
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	14	Suggested Figure for Publication (if any)	

Filing By Reference:

Only complete this section when filing an application by reference under 35 U.S.C. 111(c) and 37 CFR 1.57(a). Do not complete this section if application papers including a specification and any drawings are being filed. Any domestic benefit or foreign priority information must be provided in the appropriate section(s) below (i.e., "Domestic Benefit/National Stage Information" and "Foreign Priority Information").

For the purposes of a filing date under 37 CFR 1.53(b), the description and any drawings of the present application are replaced by this reference to the previously filed application, subject to conditions and requirements of 37 CFR 1.57(a).

Application number of the previously filed application	Filing date (YYYY-MM-DD)	Intellectual Property Authority or Country

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	530808US
		Application Number	New Application
Title of Invention	TRANSMISSION MANAGEMENT APPARATUS		

Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☐ **Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not be** the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32). Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing.

Please Select One: ☒ Customer Number ☐ US Patent Practitioner ☐ Limited Recognition (37 CFR 11.9)

Customer Number 22850

Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, or 365(c) or indicate National Stage entry from a PCT application. Providing this information in the application data sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78. When referring to the current application, please leave the application number blank.

Prior Application Status	Pending				
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)		
	Continuation of	15/442,787	2017-02-27		
Prior Application Status	Patented				
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
15/442,787	Continuation of	15/041,570	2016-02-11	9,621,848	2017-04-11
Prior Application Status	Patented				
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
15/041,570	Division of	13/989,665	2013-05-24	9,307,197	2016-04-05
Prior Application Status	Expired				
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)		
13/989,665	a 371 of international	PCT/JP12/055011	2012-02-22		

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	530808US
		Application Number	New Application
Title of Invention	TRANSMISSION MANAGEMENT APPARATUS		

Foreign Priority Information:

This section allows for the applicant to claim priority to a foreign application. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55. When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX) the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(i)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

Application Number	Country	Filing Date (YYYY-MM-DD)	Access Code (if applicable)
2011-042365	Japan	2011-02-28	
Application Number	Country	Filing Date (YYYY-MM-DD)	Access Code (if applicable)
2011-236251	Japan	2011-10-27	

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after ☐ March 16, 2013.

NOTE: By providing this statement under 37 CFR 1.55 or 1.78 this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.

Authorization or Opt-Out of Authorization to Permit Access:

When this Application Data Sheet is properly signed and filed with the application, applicant has provided written authority to permit a participating foreign intellectual property (IP) office access to the instant application-as-filed (see paragraph A in subsection 1 below) and the European Patent Office (EPO) access to any search results from the instant application (see paragraph B in subsection 1 below).

Should applicant choose not to provide an authorization identified in subsection 1 below, applicant must opt-out of the authorization by checking the corresponding box A or B or both in subsection 2 below.

NOTE: This section of the Application Data Sheet is **ONLY** reviewed and processed with the **INITIAL** filing of an application. After the initial filing of an application, an Application Data Sheet cannot be used to provide or rescind authorization for access by a foreign IP office(s). Instead, Form PTO/SB/39 or PTO/SB/69 must be used as appropriate.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	530808US
		Application Number	New Application
Title of Invention	TRANSMISSION MANAGEMENT APPARATUS		

1. Authorization to Permit Access by a Foreign Intellectual Property Office(s)

A. Priority Document Exchange (PDX) - Unless box A in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People's Republic of China (SIPO), the World Intellectual Property Organization (WIPO), and any other foreign intellectual property office participating with the USPTO in a bilateral or multilateral priority document exchange agreement in which a foreign application claiming priority to the instant patent application is filed, access to: (1) the instant patent application-as-filed and its related bibliographic data, (2) any foreign or domestic application to which priority or benefit is claimed by the instant application and its related bibliographic data, and (3) the date of filing of this Authorization. See 37 CFR 1.14(h)(1).

B. Search Results from U.S. Application to EPO - Unless box B in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the EPO access to the bibliographic data and search results from the instant patent application when a European patent application claiming priority to the instant patent application is filed. See 37 CFR 1.14(h)(2).

The applicant is reminded that the EPO's Rule 141(1) EPC (European Patent Convention) requires applicants to submit a copy of search results from the instant application without delay in a European patent application that claims priority to the instant application.

2. Opt-Out of Authorizations to Permit Access by a Foreign Intellectual Property Office(s)

☐ A. Applicant **DOES NOT** authorize the USPTO to permit a participating foreign IP office access to the instant application-as-filed. If this box is checked, the USPTO will not be providing a participating foreign IP office with any documents and information identified in subsection 1A above.

☐ B. Applicant **DOES NOT** authorize the USPTO to transmit to the EPO any search results from the instant patent application. If this box is checked, the USPTO will not be providing the EPO with search results from the instant application.

NOTE: Once the application has published or is otherwise publicly available, the USPTO may provide access to the application in accordance with 37 CFR 1.14.

Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

Applicant 1

If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.

☒ Assignee	☐ Legal Representative under 35 U.S.C. 117	☐ Joint Inventor
☐ Person to whom the inventor is obligated to assign.	☐ Person who shows sufficient proprietary interest	

If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	530808US
		Application Number	New Application
Title of Invention	TRANSMISSION MANAGEMENT APPARATUS		

Name of the Deceased or Legally Incapacitated Inventor :			
If the Applicant is an Organization check here. ☒			
Organization Name	RICOH COMPANY, LTD.		

Mailing Address Information For Applicant:			
Address 1	3-6, Nakamagome 1-chome, Ohta-ku		
Address 2			
City	Tokyo	State/Province	
Country	Japan	Postal Code	143-8555
Phone Number		Fax Number	
Email Address			

Assignee Information including Non-Applicant Assignee Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

Assignee 1

Complete this section if assignee information, including non-applicant assignee information, is desired to be included on the patent application publication. An assignee-applicant identified in the "Applicant Information" section will appear on the patent application publication as an applicant. For an assignee-applicant, complete this section only if identification as an assignee is also desired on the patent application publication.

If the Assignee or Non-Applicant Assignee is an Organization check here. ☒

Organization Name	RICOH COMPANY, LTD.
-------------------	---------------------

Mailing Address Information For Assignee including Non-Applicant Assignee:

Address 1	3-6, Nakamagome 1-chome, Ohta-ku		
Address 2			
City	Tokyo	State/Province	
Country	Japan	Postal Code	143-8555
Phone Number		Fax Number	
Email Address			

Signature:

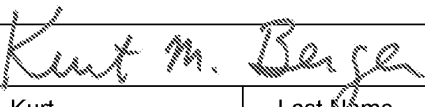
NOTE: This Application Data Sheet must be signed in accordance with 37 CFR 1.33(b). However, if this Application Data Sheet is submitted with the INITIAL filing of the application and either box A or B is not checked in subsection 2 of the "Authorization or Opt-Out of Authorization to Permit Access" section, then

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	530808US
		Application Number	New Application
Title of Invention	TRANSMISSION MANAGEMENT APPARATUS		

this form must also be signed in accordance with 37 CFR 1.14(c).

This Application Data Sheet **must** be signed by a patent practitioner if one or more of the applicants is a **juristic entity** (e.g., corporation or association). If the applicant is two or more joint inventors, this form must be signed by a patent practitioner, **all** joint inventors who are the applicant, or one or more joint inventor-applicants who have been given power of attorney (e.g., see USPTO Form PTO/AIA/81) on behalf of **all** joint inventor-applicants.

See 37 CFR 1.4(d) for the manner of making signatures and certifications.

Signature				Date (YYYY-MM-DD)	2020-06-17
First Name	Kurt	Last Name	Berger	Registration Number	51,461

CLAIMS

1. A transmission management apparatus for managing transmission states of a plurality of transmission
terminals including a first transmission terminal and a
second transmission terminal, the transmission management
apparatus comprising:
- a terminal management table storage unit configured to store therein a terminal management table in which terminal
information including an identifier and an identification
name of each of the transmission terminals is managed;
 - a receiving unit configured to receive a terminal
information request signal from the first transmission
terminal, the terminal information request signal
indicating a request for information for identifying the
second transmission terminal, the first transmission
terminal and the second transmission terminal being in
transmission therebetween;
 - a terminal state acquisition unit configured to
acquire the information for identifying the second
transmission terminal from the terminal management table in
response to the terminal information request signal; and
 - a transmitting unit configured to transmit the
information acquired by the terminal state acquisition unit
to the first transmission terminal.

30

FIG.1 TRANSMISSION SYSTEM

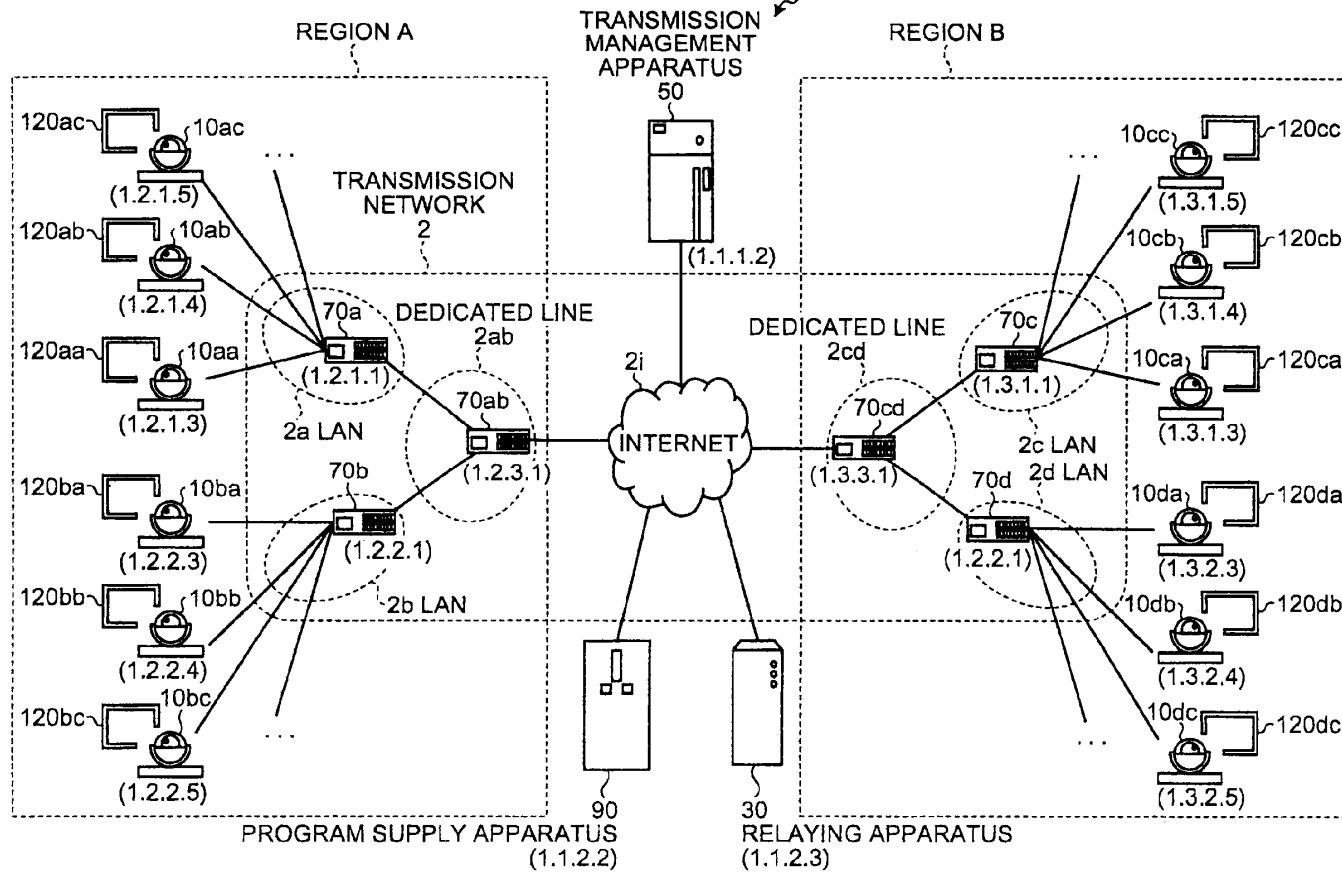


FIG.2

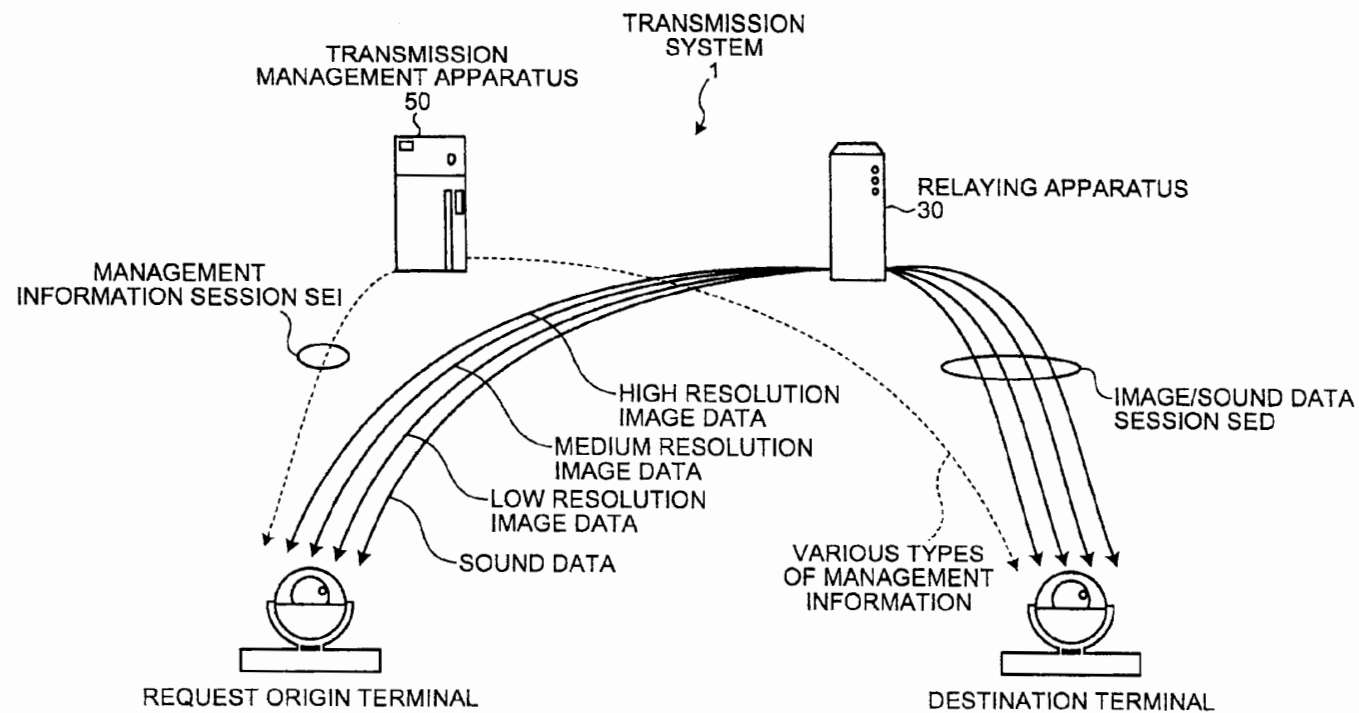


FIG.3

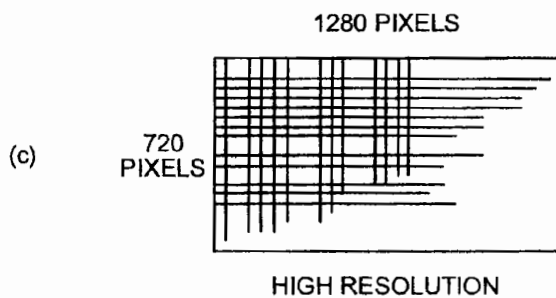
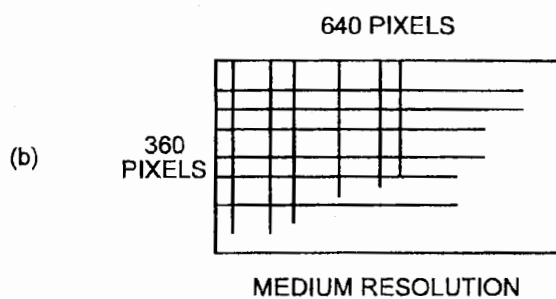
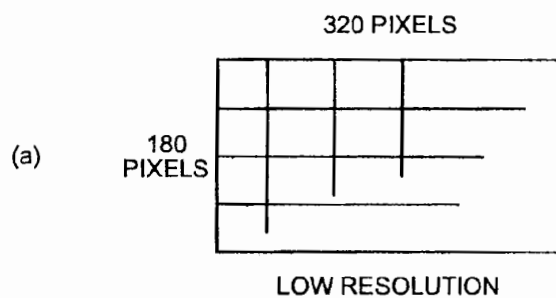


FIG.4

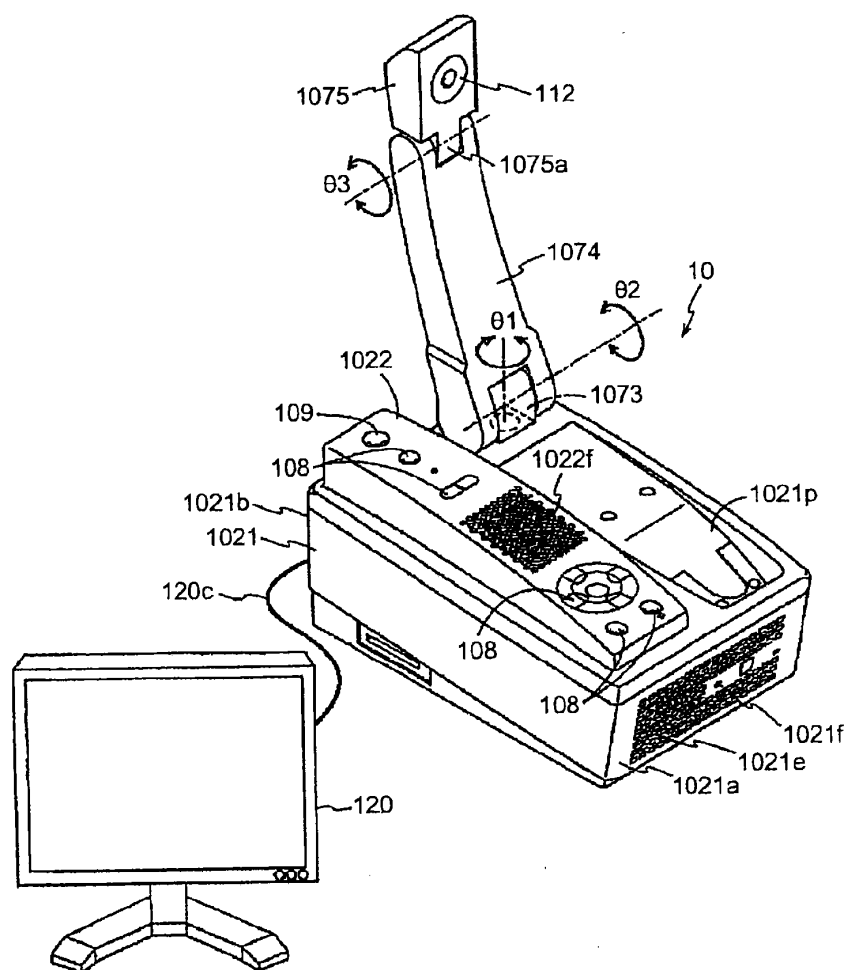


FIG.5

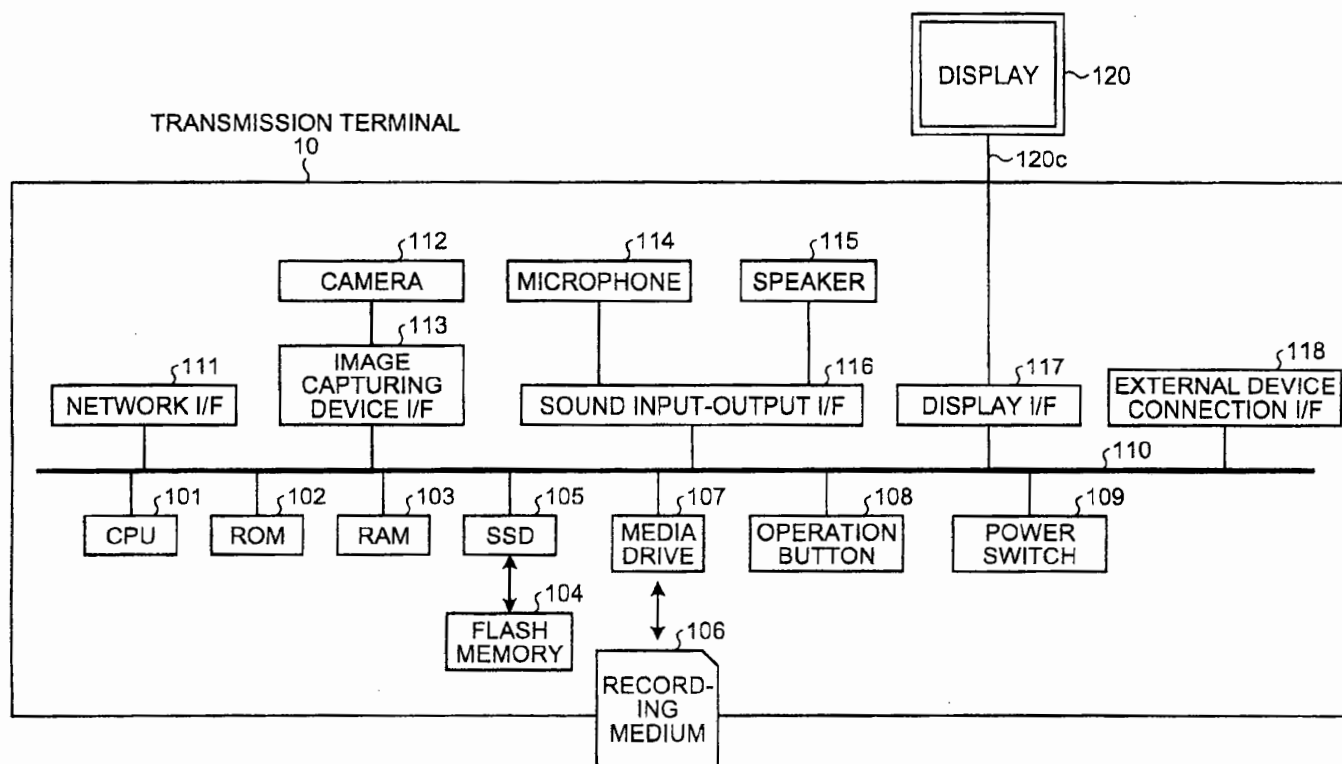


FIG.6

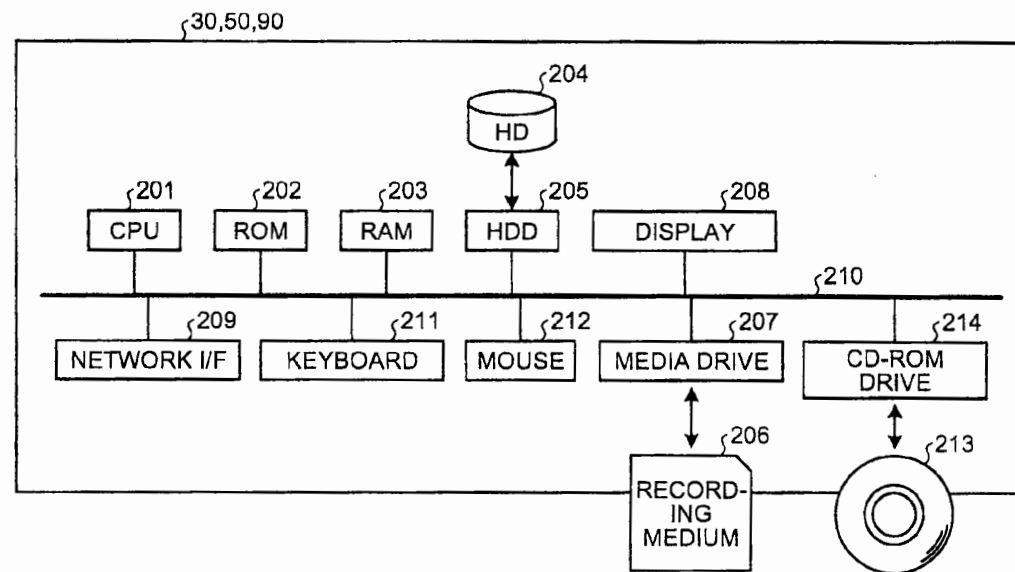


FIG.7

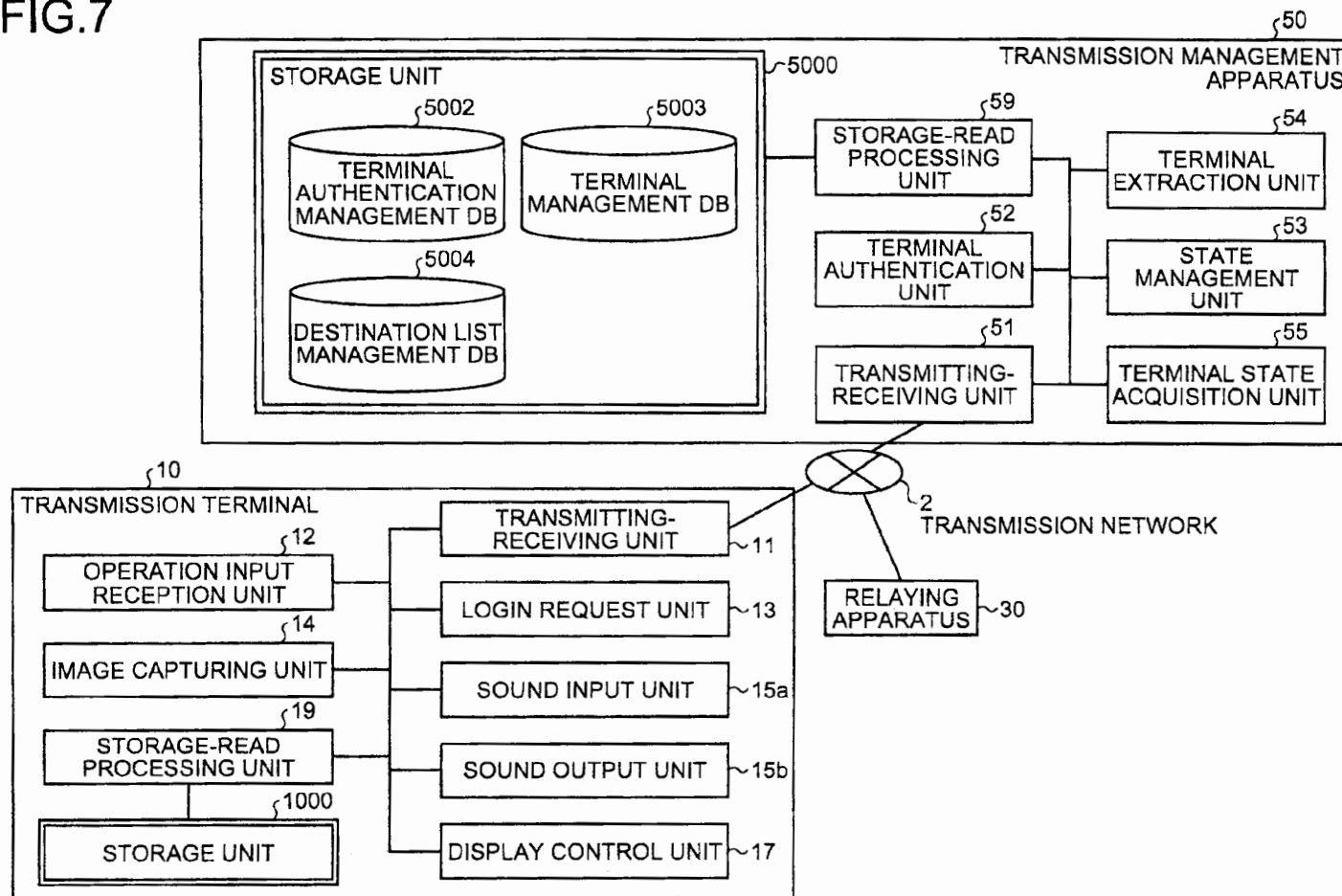
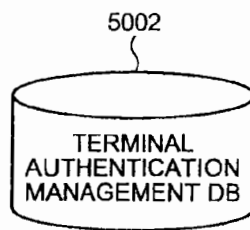


FIG.8



TERMINAL ID	PASSWORD
01aa	aaaa
01ab	abab
01ba	baba
...	...

FIG.9

5003



TERMINAL ID	TERMINAL NAME	OPERATION STATE	RECEIVING DATE	IP ADDRESS OF TERMINAL
01aa	AA TERMINAL, TOKYO BUSINESS OFFICE, JAPAN	ONLINE (TRANSMISSION IS ENABLED)	2009.11.10. 13:40	1.2.1.3
01ab	AB TERMINAL, TOKYO BUSINESS OFFICE, JAPAN	OFFLINE	2009.11.09. 12:00	1.2.1.4
...	...	...	...	...
01ba	BA TERMINAL, OSAKA BUSINESS OFFICE, JAPAN	ONLINE (TRANSMISSION IS ENABLED)	2009.11.10. 13:45	1.2.2.3
01bb	BB TERMINAL, OSAKA BUSINESS OFFICE, JAPAN	ONLINE (TRANSMISSION IS ENABLED)	2009.11.10. 13:50	1.2.2.4
...	...	...	...	...
01ca	CA TERMINAL, NEW YORK BUSINESS OFFICE, USA	OFFLINE	2009.11.10. 12:45	1.3.1.3
01cb	CB TERMINAL, NEW YORK BUSINESS OFFICE, USA	ONLINE (IN TRANSMISSION)	2009.11.10. 13:55	1.3.1.4
...	...	...	...	...
01da	DA TERMINAL, WASHINGTON BUSINESS OFFICE, USA	OFFLINE	2009.11.08. 12:45	1.3.2.3
01db	DB TERMINAL, WASHINGTON BUSINESS OFFICE, USA	ONLINE (IN TRANSMISSION)	2009.11.10. 12:45	1.3.2.4
...	...	...	...	...

FIG.10

5004



REQUEST SOURCE TERMINAL ID	DESTINATION TERMINAL ID
01aa	01ab, 01ba, 01db
01ab	01aa, 01ca, 01cb
01ba	01aa, 01ab, 01ca, 01cb, 01da, 01db
...	...
01db	01aa, 01ab, 01ba, ..., 01da, 01ca, 01cb, ..., 01da

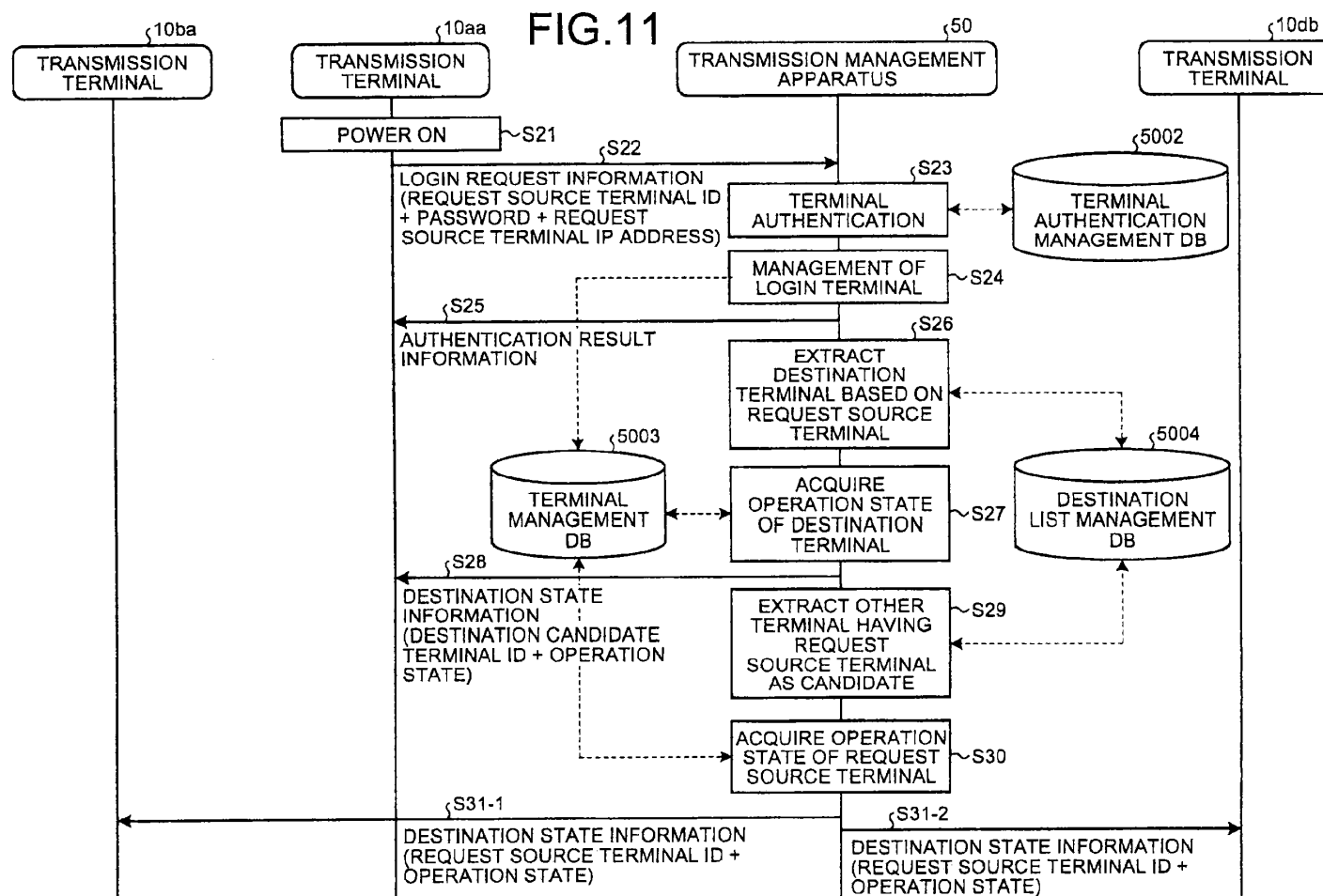


FIG.12

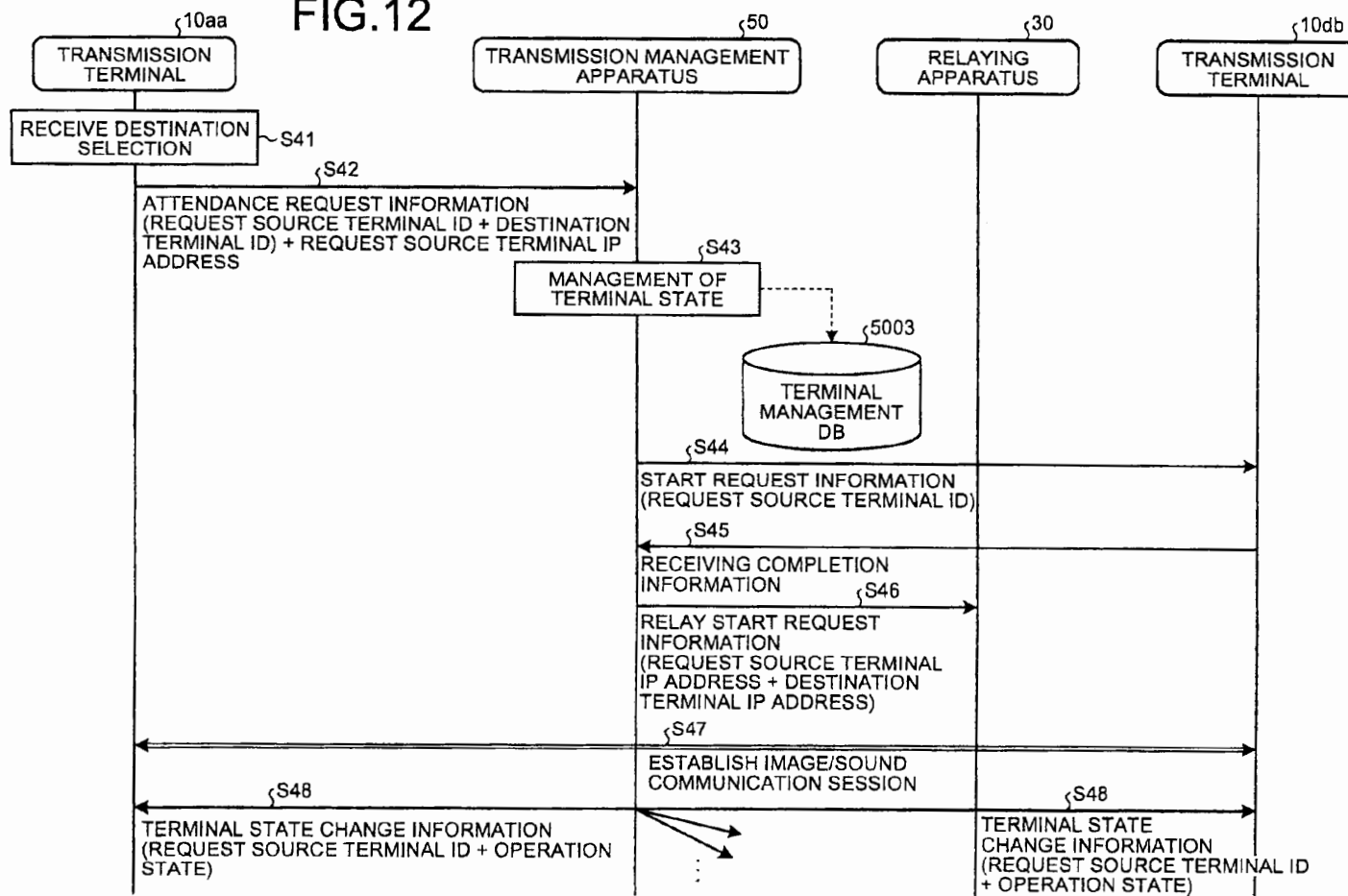


FIG.13

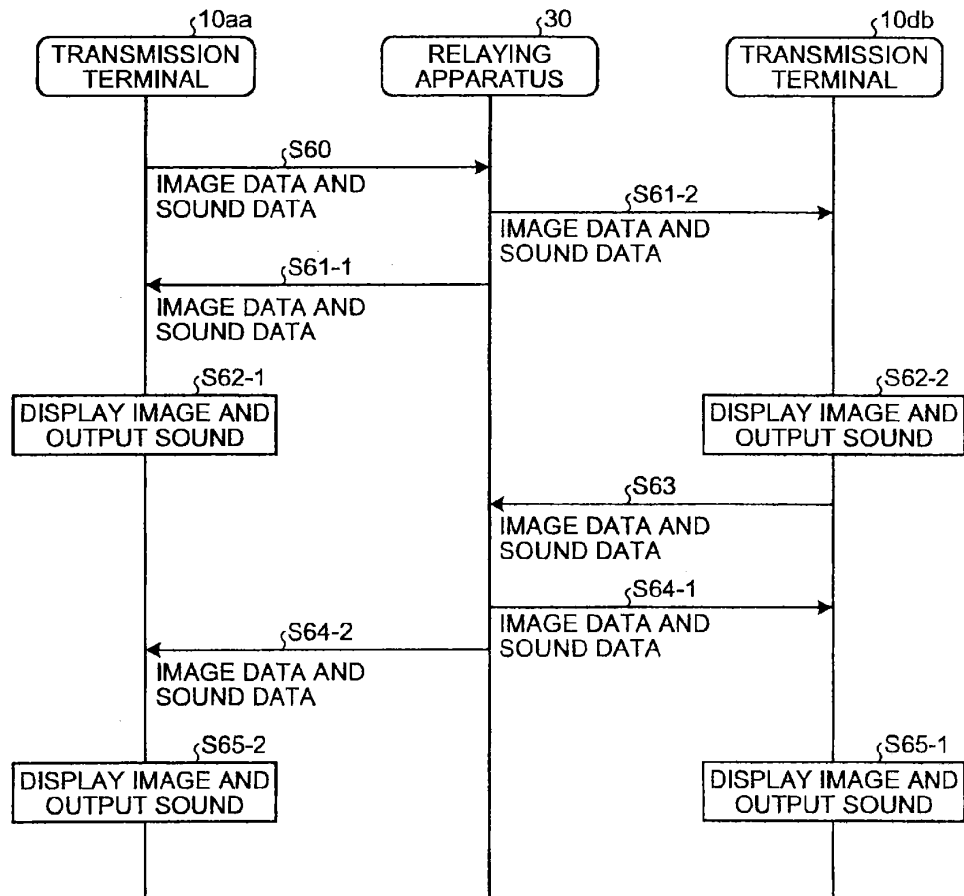


FIG.14

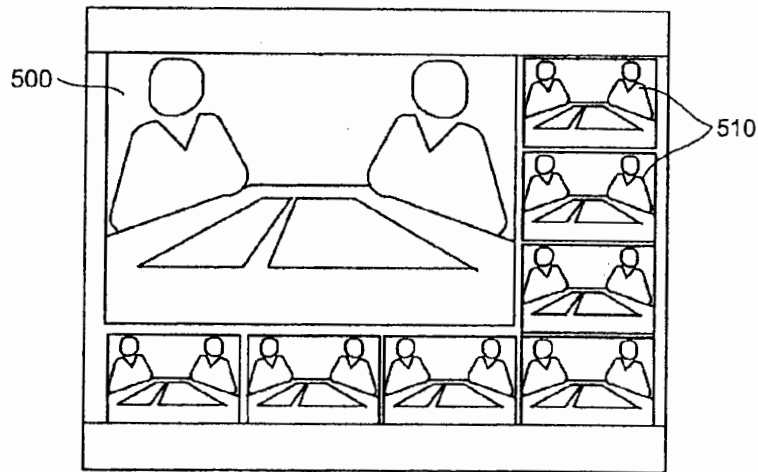
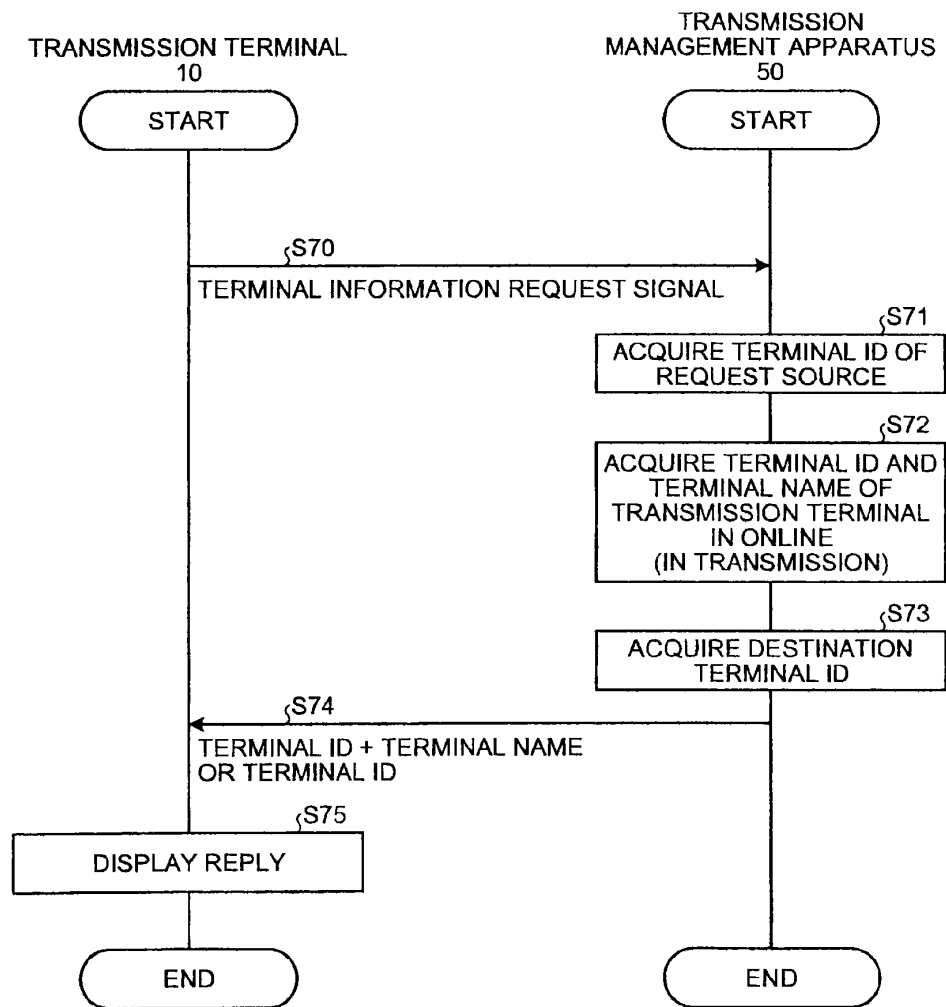


FIG.15

DETAILED CONFERENCE INFORMATION LIST OF SITES ATTENDING CONFERENCE		
	TERMINAL NAME	TERMINAL ID
520	01: AA TERMINAL, TOKYO BUSINESS OFFICE, JAPAN	01aa
	02	01cb
	03: DB TERMINAL, WASHINGTON BUSINESS OFFICE, USA	01db
		530

FIG.16



Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 530808US		SERIAL NO. New Application	
LIST OF REFERENCES CITED BY APPLICANT				APPLICANT Yoshinaga KATO, et al.			
				FILING DATE Herewith		GROUP	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	5,402,418 A	03/28/1995	Yoji SHIBATA, et al.			
	AB	5,604,738 A	02/18/1997	Yoji SHIBATA, et al.			
	AC	5,970,054 A	10/19/1999	Yoji SHIBATA, et al.			
	AD	2006/0055771-A1	03-2006	Kies; Jonathan K.			
	AE	2008/0016156-A1	01-2008	Miceli; Sean			
	AF	2012/0300014-A1	11-2012	Krantz; Anton			
	AG	2013/0063542-A1	03-2013	Bhat; Raghurama			
	AH	2012/0182384-A1	07-2012	Anderson; Eric C.			
	AI	2011/0026517-A1	02-2011	Capuozzo; Giuseppe			
	AJ	2004/0001501 A1	01-2004	Delveaux, William J.			
	AK						
	AL						
	AM						
	AN						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES NO		
	AO	2012-075073	04/12/2012	Japan (with English abstract)			x
	AP	3308563	05/17/2002	Japan (corresponding to US 5,402,418 A, US 5,604,738 A and US 5,970,054 A)			x
	AQ	2006-005590	01/05/2006	Japan (with English abstract)			x
	AR	09-200723	07/31/1997	Japan (with English abstract)			x
	AS	2004-080349	03/11/2004	Japan (with English abstract)			x
	AT	10-164541	06/19/1998	Japan (with English abstract)			x
	AU	08-223550	08/30/1996	Japan (with English abstract)			x
	AV						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	AW	International Search Report issued April 3, 2012, in PCT/JP2012/055011, filed February 22, 2012					
	AX	NIIMI, Yasuhisa. Speech Recognition. Japan. Kyoritsu Publishing, Co. 1979. Pages 68 to 72					
	AY						
	AZ					☒ Additional References sheet(s) attached	
Examiner					Date considered		
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 530808US		SERIAL NO. New Application	
LIST OF REFERENCES CITED BY APPLICANT				APPLICANT Yoshinaga KATO, et al.			
				FILING DATE Herewith		GROUP	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	2008/002020 A1	01/03/2008	Woo-Young CHOI et al.			
	AB	2007/0100944 A1	05-2007	Ford; Peter S.			
	AC	2010/0226546 A1	09-2010	Tanaka; Akifumi			
	AD	2013/0117472 A1	05-2013	Sexton; Daniel White			
	AE	2012/0185685 A1	07-2012	VOLMAT; Alain			
	AF	2010/0250252 A1	09-2010	Yasoshima; Mizuho			
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						
	AM						
	AN						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES NO		
	AO	JP 2001-188740	07/10/2001	Japan (with English Abstract)			X
	AP	JP 6-217019	08/05/1994	Japan (with English Abstract)			X
	AQ	2001-313915 A	11-09-2001	Japan (with English Abstract)			X
	AR						
	AS						
	AT						
	AU						
	AV						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	AW	Yasuhisa NIIMI, "Speech Recognition", Japan, Kyoritsu Publishing, Co., 1979, 9 pages (English Translation of the Relevant Part only)					
	AX	Office Action issued July 7, 2015 in Japanese Patent Application No. 2013-141296					
	AY	European Search Report mailed September 25, 2015 in Patent Application No. 12751848.8					
	AZ	Office Action issued on Feb. 26, 2019 in Japanese Patent Application No. 2018-022985				☐ Additional References sheet(s) attached	
Examiner						Date considered	
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Docket No. 530808US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Yoshinaga KATO, et al.

GAU:

SERIAL NO: New Application

EXAMINER:

FILED: Herewith

FOR: TRANSMISSION MANAGEMENT APPARATUS

SUBMISSION NOTICE REGARDING PRIORITY DOCUMENT(S)

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

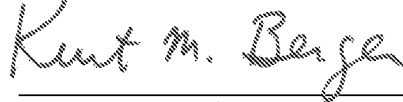
Commissioner:

Certified copies of the Convention Application(s) corresponding to the above-captioned matter:

- ☐ are submitted herewith
- ☒ were retrieved by the USPTO in prior application Serial No. 15/442,787 filed February 27, 2017
- ☐ were submitted to the International Bureau in PCT Application Number _____
Receipt of the certified copies by the International Bureau in a timely manner under PCT Rule 17.1(a) has been acknowledged as evidenced by the attached PCT/IB/304.

Respectfully Submitted,

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Electronic Acknowledgement Receipt	
EFS ID:	39745376
Application Number:	16903713
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File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		530808usNewApplication.pdf	1257411	yes	75
			30df097e8642af547b1dbb0514797bf058800ae7		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Transmittal of New Application		1	1	
	Miscellaneous Incoming Letter		2	2	
	Application Data Sheet		3	9	
	Specification		10	52	
	Claims		53	53	
	Abstract		54	54	
	Drawings-only black and white line drawings		55	68	
	Oath or Declaration filed		69	70	
	Power of Attorney		71	72	
	Transmittal Letter		73	73	
	Information Disclosure Statement (IDS) Form (SB08)		74	75	
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Information:					
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If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN
APPLICATION DATA SHEET (37 CFR 1.76)

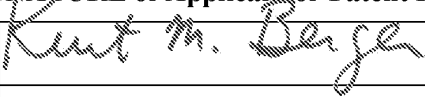
Title of Invention	TRANSMISSION MANAGEMENT APPARATUS
As a below named inventor, I hereby declare that: This declaration is directed to: ☐ The attached application, or ☒ United States application or PCT international application number 15/041,570 Filed on February 11, 2016 The above-identified application was made or authorized to be made by me. I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.	
LEGAL NAME OF INVENTOR	
Inventor: Yoshinaga KATO	Date (Optional): March 25, 2016
Signature: <u>Yoshinaga Kato</u>	
Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use an additional declaration form for each additional inventor.	

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN
APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	TRANSMISSION MANAGEMENT APPARATUS
As a below named inventor, I hereby declare that: This declaration is directed to: ☐ The attached application, or ☒ United States application or PCT international application number 15/041,570 Filed on February 11, 2016 The above-identified application was made or authorized to be made by me. I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.	
LEGAL NAME OF INVENTOR	
Inventor: Taro OKUYAMA	Date (Optional): March 17, 2016
Signature: Taro Okuyama	
Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use an additional declaration form for each additional inventor.	

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NOTE: This form is to be submitted with the Power of Attorney by Applicant form to identify the application to which the Power of Attorney is directed, in accordance with 37 CFR 1.5. If the Power of Attorney by Applicant form is not accompanied by this transmittal form or an equivalent, the Power of Attorney will not be recognized in the application.

Application Number	New Application		
Patent Number			
Filing Date	Herewith		
Issue Date			
First Named Inventor	Yoshinaga KATO		
Title	TRANSMISSION MANAGEMENT APPARATUS		
Art Unit			
Examiner Name			
Attorney Docket Number	530808US		
SIGNATURE of Applicant or Patent Practitioner			
Signature		Date	06-17-2020
Name	Kurt M. Berger, Ph.D.	Telephone	703-413-3000
Registration Number	51,461		
NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications.			
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Attorney Docket Number: 501549US

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(c).

I hereby appoint:

☒ Practitioners associated with the Customer Number:

22850

as attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO), in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(c).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(c) to:

☒ The address associated with Customer Number:

22850

Assignee Name and Address:
 RICOH COMPANY, LTD.
 3-6, Nakamagome 1-chome, Ohta-ku
 Tokyo 143-8555
 Japan

A copy of this form, together with a statement under 37 CFR 3.73(c) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(c) may be completed by one of the practitioners appointed in this form, and must identify the application in which this Power of Attorney is to be filed.

SIGNATURE of Assignee of Record

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature		Date	March 14, 2018
Name	Kaoru IKEYA	Telephone	
Title	General Manager, Intellectual Property Development Center, Intellectual Property Division		

DESCRIPTION

TRANSMISSION MANAGEMENT APPARATUS

This application is a continuation Application of U.S.
5 Application Serial No. 15/442,787, filed February 27, 2017,
which is a continuation Application of U.S. Application
Serial No.15/041,570, filed February 11, 2016 (now U.S.
Patent No. 9,621,848), which is a divisional Application of
U.S. Application Serial No. 13/989,665, filed May 24, 2013
10 (now U.S. Patent No. 9,307,197), which is a National Stage
application of PCT/JP2012/55011, filed February 22, 2012,
and claims priority to Japanese Priority Application No.
2011-236251 filed October 27, 2011, and Japanese Priority
Application No. 2011-042365 filed February 28, 2011. The
15 entire contents of the above-identified applciations are
incorporated herein by reference.

TECHNICAL FIELD

The present invention relates to a transmission
20 management apparatus, for example, to a transmission
management apparatus that manages transmission states of
transmission terminals used in a remote conference system
with which a remote conference is held through a network.

25 BACKGROUND ART

Remote conference systems realize situations similar
to actual conferences as follows. Images and sounds are
collected by imaging attendees and collecting utterances of
the attendees in conference rooms where remote conferences
30 are held. The collected images and sounds are converted
into digital data and transmitted by transmission terminals
on one side to other transmission terminals on the other
parties' side. The images are displayed on displays such

as video screens and the sounds are output from speakers in conference rooms on the other parties' side.

In an example of such remote conference systems, a remote conference can be realized among a plurality of sites by a relaying apparatus that is coupled to all of the transmission terminals attending the conference and controls delivery of image data and sound data to each transmission terminal.

Generally, in a remote conference held among sites, a display screen of the transmission terminal is divided into the number of transmission terminals attending the conference and images transmitted from other transmission terminals are displayed in the divided areas on the display screen so as to know who is attending the conference through other transmission terminals during the conference (e.g., refer to Japanese Patent No. 3308563).

Such a conventional technique, however, has a problem in that users who use the respective transmission terminals cannot grasp which transmission terminal is attending the conference when the number of transmission terminals attending the conference increases because the division number of the display screen is increased and thus a display area for displaying an image transmitted from each transmission terminal is reduced.

Therefore, there is a need for a transmission management apparatus that enables users who use respective transmission terminals to grasp which transmission terminal is attending a conference regardless of the number of transmission terminals attending the conference.

30

DISCLOSURE OF INVENTION

It is an object of the present invention to at least partially solve the problems in the conventional technology.

According to an embodiment, there is provided a transmission management apparatus for managing transmission states of a plurality of transmission terminals including a first transmission terminal and a second transmission
5 terminal. The transmission management apparatus includes a terminal management table storage unit configured to store therein a terminal management table in which terminal information including an identifier and an identification name of each of the transmission terminals is managed; a
10 receiving unit configured to receive a terminal information request signal from the first transmission terminal, the terminal information request signal indicating a request for information for identifying the second transmission terminal, the first transmission terminal and the second
15 transmission terminal being in transmission therebetween; a terminal state acquisition unit configured to acquire the information for identifying the second transmission terminal from the terminal management table in response to the terminal information request signal; and a transmitting
20 unit configured to transmit the information acquired by the terminal state acquisition unit to the first transmission terminal.

According to another embodiment, there is provided a transmission terminal that includes a transmitting unit
25 configured to transmit a terminal information request signal to a transmission management apparatus for managing transmission states of a plurality of transmission terminals through a network, the terminal information request signal indicating a request for information for
30 identifying at least one of the transmission terminals, the transmission terminal and the at least one of the transmission terminals being in transmission therebetween; a receiving unit configured to receive the information that

is transmitted from the transmission management apparatus in response to the terminal information request signal; and a display control unit configured to cause a display unit to display the information received by the receiving unit.

5 According to still another embodiment, there is provided a transmission system that includes a plurality of transmission terminals each according to the transmission terminal according to the above embodiment; and the transmission management apparatus according to the above
10 embodiment.

 According to still another embodiment, there is provided a transmission management method for managing transmission states of a plurality of transmission terminals including a first transmission terminal and a
15 second transmission terminal using a transmission management apparatus. The transmission management method includes receiving a terminal information request signal from the first transmission terminal, the terminal information request signal indicating a request for
20 information for identifying the second transmission terminal, the first transmission terminal and the second transmission terminal being in transmission therebetween; acquiring the information for identifying the second transmission terminal from a terminal management table in
25 which terminal information including an identifier and an identification name of each of the transmission terminals is managed, in response to the terminal information request signal, the terminal management table being stored in a recording medium; and transmitting the acquired information
30 to the first transmission terminal.

 According to still another embodiment, there is provided a transmission terminal control method using a transmission terminal. The transmission terminal control

method includes transmitting a terminal information request signal to a transmission management apparatus for managing transmission states of a plurality of transmission terminals through a network, the terminal information request signal indicating a request for information for identifying at least one of the transmission terminals, the transmission terminal and the at least one of the transmission terminals being in transmission therebetween; receiving the information that is transmitted from the transmission management apparatus in response to the terminal information request signal; and causing a display unit to display the received information.

According to still another embodiment, there is provided a computer program product that includes a non-transitory computer readable medium including programmed instructions, wherein the instructions cause a computer to execute any one of the method according to the above embodiment.

The above and other objects, features, advantages and technical and industrial significance of this invention will be better understood by reading the following detailed description of presently preferred embodiments of the invention, when considered in connection with the accompanying drawings.

25

BRIEF DESCRIPTION OF DRAWINGS

Fig. 1 is a schematic illustrating a structure of a transmission system;

Fig. 2 is a conceptual view illustrating a state of transmitting and receiving of image data, sound data, and various types of management information in the transmission system;

Fig. 3 illustrates image quality of the image data;

Fig. 4 is an external view of a transmission terminal;

Fig. 5 is a schematic illustrating a hardware structure of the transmission terminal;

Fig. 6 is a schematic illustrating a hardware structure of a transmission management apparatus, a relaying apparatus, or a program supply apparatus;

Fig. 7 is a functional block diagram of the transmission terminal and the transmission management system;

Fig. 8 is a conceptual view of a terminal authentication management table;

Fig. 9 is a conceptual view of a terminal management table;

Fig. 10 is a conceptual view of a destination list management table;

Fig. 11 is a sequence diagram illustrating preparatory stage operation of the transmission system;

Fig. 12 is a sequence diagram illustrating conference attendance operation of the transmission system;

Fig. 13 is a sequence diagram illustrating data transmission operation of the transmission system;

Fig. 14 is a conceptual view illustrating a display screen in an all-image display mode;

Fig. 15 is a conceptual view illustrating a display screen in an information display mode; and

Fig. 16 is a sequence diagram illustrating terminal information display operation of the transmission system.

BEST MODE FOR CARRYING OUT THE INVENTION

An embodiment of the present invention will be described below with reference to the accompanying drawings.

<<Overall structure of embodiment>>

Fig. 1 is a schematic of a transmission system 1

according to the embodiment. Fig. 2 is a conceptual view illustrating a state of transmitting and receiving of image data, sound data, and various types of management information in the transmission system 1. Fig. 3 illustrates image quality of the image data.

The transmission system includes a data supply system in which content data is transmitted from a transmission terminal to a plurality of transmission terminals through a transmission management apparatus in one direction and a communication system in which information and feelings, for example, are mutually transmitted among the transmission terminals through the transmission management apparatus. The communication system is a system for transmitting information and feelings mutually between a plurality of communication terminals (corresponding to the "transmission terminals") through a communication management apparatus (corresponding to the "transmission management apparatus"). Examples of the communication system include a video conference system and a video telephone system.

In the embodiment, the transmission system, the transmission management apparatus, and the transmission terminal are described on the assumption of the video conference system as an example of the communication system, a video conference management apparatus as an example of the communication management apparatus, and a video conference terminal as an example of the communication terminal. That is, the transmission terminal and the transmission management apparatus are applicable to not only the video conference system but also the communication system or a data transmission system.

As illustrated in Fig. 1, the transmission system 1 includes a plurality of transmission terminals 10aa, 10ab, ..., displays 120aa, 120ab, ..., for the respective

transmission terminals 10aa, 10ab, ..., a relaying apparatus 30, a transmission management apparatus 50, and a program supply apparatus 90. The transmission terminals 10aa, 10ab, ..., perform transmission by transmitting and
5 receiving content data, such as image data and sound data.

In the following descriptions, an arbitrary transmission terminal among the transmission terminals 10aa, 10ab, ..., is expressed as a "transmission terminal 10", and an arbitrary display among the displays 120aa,
10 120ab, ..., is expressed as a "display 120". In addition, one of the transmission terminals 10 that requests a start of a video conference as a request source is expressed as a "request source terminal" and another transmission terminal 10 that is a destination of the request is expressed as a
15 "destination terminal".

As illustrated in Fig. 2, in the transmission system 1, a management information session SEI for transmitting and receiving various types of management information is established between the request source terminal and the
20 destination terminal through the transmission management apparatus 50.

Between the transmission terminals 10 with the management information session SEI established, four sessions are established for transmitting and receiving
25 four pieces of high resolution image data, medium resolution image data, low resolution image data, and sound data through the relaying apparatus 30. In the embodiment, the four sessions are collectively expressed as an "image/sound data session SED".

30 The image data in the embodiment is scalably encoded. For example, image data in the embodiment includes low resolution image data that is composed of 320 pixels horizontally and 180 pixels vertically as illustrated in

(a) of Fig. 3 and serves as a base image, medium resolution image data composed of 640 pixels horizontally and 360 pixels vertically as illustrated in (b) of Fig. 3, and high resolution image data composed of 1280 pixels horizontally and 720 pixels vertically as illustrated in (c) of Fig. 3.

When a bandwidth through which image data is transmitted is narrow, only the low resolution image data serving as the base image is transmitted and the transmission terminal 10 on a receiving side can display only a low quality image in accordance with the transmitted low resolution image data.

When the bandwidth through which image data is transmitted is relatively wide, the low resolution image data serving as the base image and the medium resolution image data are transmitted and the transmission terminal 10 on the receiving side can display a medium quality image in accordance with the transmitted low resolution image data and medium resolution image data.

When the bandwidth through which image data is transmitted is very wide, the low resolution image data serving as the base image, the medium resolution image data, and the high resolution image data are transmitted and the transmission terminal 10 on the receiving side can display a high quality image in accordance with the transmitted low resolution image data, medium resolution image data, and high resolution image data.

In Fig. 1, the relaying apparatus 30 relays content data among the transmission terminals 10. The transmission management apparatus 50 performs login authentication of the transmission terminal 10 and manages a transmission state of the transmission terminal 10, a destination list, and a transmission state of the relaying apparatus 30, for example, in an integrated fashion. Images represented by

the image data may be moving images or still images, or both moving and still images.

A plurality of routers 70a, 70b, 70c, 70d, 70ab, and 70cd select optimal routes for image data and sound data.

5 In the following descriptions, an arbitrary router among the routers 70a, 70b, 70c, 70d, 70ab, and 70cd is expressed as a "router 70".

The program supply apparatus 90 includes an HD (Hard Disk) 204 (refer to Fig. 6), which is described later. A
10 transmission terminal control program enabling the transmission terminal 10 to have various functions is stored in the HD 204. The program supply apparatus 90 can transmit the transmission terminal control program to the transmission terminal 10.

15 In addition, the program supply apparatus 90 stores a relaying apparatus program enabling the relaying apparatus 30 to have various functions in the HD 204 and can transmit the relaying apparatus program to the relaying apparatus 30.

Furthermore, the program supply apparatus 90 also
20 stores a transmission management program enabling the transmission management apparatus 50 to have various functions in the HD 204 and can transmit the transmission management program to the transmission management apparatus 50.

25 The transmission terminals 10aa, 10ab, 10ac, ..., and the router 70a are coupled to each other with a LAN 2a so as to enable transmission among them. Transmission terminals 10ba, 10bb, 10bc, ..., and the router 70b are coupled to each other with a LAN 2b so as to enable
30 transmission among them.

The LANs 2a and 2b are coupled to each other with a dedicated line 2ab including the router 70ab so as to enable transmission among them, and disposed in a

predetermined region A. For example, the region A is Japan and the LAN 2a is disposed in a business office in Tokyo while the LAN 2b is disposed in a business office in Osaka.

Transmission terminals 10ca, 10cb, 10cc, ..., and the
5 router 70c are coupled to each other with a LAN 2c so as to enable transmission among them. Transmission terminals 10da, 10db, 10dc, ..., and the router 70d are coupled to each other with a LAN 2d so as to enable transmission among them.

10 The LANs 2c and 2d are coupled to each other with a dedicated line 2cd including the router 70cd so as to enable transmission among them, and disposed in a predetermined region B. For example, the region B is the United States of America and the LAN 2c is disposed in a
15 business office in New York while the LAN 2d is disposed in a business office in Washington, D.C. The regions A and B are coupled to each other with the routers 70ab and 70cd through the Internet 2i so as to enable mutual transmission.

The relaying apparatus 30, the transmission management
20 apparatus 50, and the program supply apparatus 90 are coupled to each transmission terminal 10 through the Internet 2i so as to enable the apparatuses to perform transmission to each transmission terminal 10. The relaying apparatus 30, the transmission management
25 apparatus 50, and the program supply apparatus 90 may be disposed in the region A or the region B, or in any region other than the regions A and B.

In the embodiment, a transmission network 2 of the embodiment includes the LANs 2a and 2b, the dedicated lines
30 2ab and 2cd, the Internet 2i, and the LANs 2c and 2d. The transmission network 2 may include a unit in which transmission is performed wirelessly such as wireless fidelity (Wi-Fi, registered trademark) or Bluetooth

(registered trademark) besides the wired transmission.

In Fig. 1, four numbers indicated under each transmission terminal 10, the relaying apparatus 30, the transmission management apparatus 50, each router 70, and the program supply apparatus 90 simply represent commonly used IP addresses in IPv4. For example, the IP address of the transmission terminal 10aa is "1.2.1.3". IPv6 may be also used instead of IPv4. However, the explanation is made by using IPv4 for simple explanation.

Each transmission terminal 10 may be used in a video conference held in the same room, or in a video conference held between an outdoor site and an indoor site or among the outdoor sites, in addition to a video conference held among a plurality of business offices and a video conference held among different rooms in the same business office. When each transmission terminal 10 is used at an outdoor site, transmission is performed wirelessly such as a cellular phone transmission network.

<<Hardware structure of embodiment>>

As illustrated in Fig. 4, the transmission terminal 10 includes a housing 1021, an arm 1074, and a camera housing 1075. A front sidewall 1021a of the housing 1021 has a plurality of air intake holes 1021e on almost the entire surface thereof. A rear sidewall 1021b of the housing 1021 has a plurality of air exhaust holes (not illustrated) on almost the entire area thereof. As a result, the transmission terminal 10 can intake external air at the front of the transmission terminal 10 through the air intake holes 1021e and exhaust air toward the rear of the transmission terminal 10 through the air exhaust holes by driving a cooling fan included in the housing 1021. The front sidewall 1021a has a sound-collecting hole 1021f at the central part thereof. The sound-collecting hole 1021f

enables a built-in microphone 114 (refer to Fig. 5), which is described later, to collect sounds such as voices, other sounds, and noises.

The housing 1021 has an operation panel 1022 on the
5 left side when viewed from the front thereof. The operation panel 1022 is provided with operation buttons 108, a power switch 109, and a plurality of sound output holes 1022f through which sounds output from a built-in speaker 115 (refer to Fig. 5), which is described later, pass. In
10 addition, the housing 1021 has a housing unit 1021p formed in a recess so as to house the arm 1074 and the camera housing 1075, on the right side when viewed from the front thereof.

The arm 1074 is mounted on the housing 1021 with a
15 torque hinge 1073. For example, the arm 1074 is mounted so as to be rotatable in the up-down and left-right directions within a range of a pan angle $\theta 1$ of ± 180 degrees and within a range of a tilt angle $\theta 2$ of 90 degrees when the angle of the arm 1074 at the front is 0 degrees with respect to the
20 housing 1021. When the tilt angle $\theta 2$ is approximately 45 degrees, a click feeling is generated.

The camera housing 1075 includes a built-in camera 112 (refer to Fig. 5), which is described later. The camera 112 can be used to image a user and a room, for example.
25 The camera housing 1075 has a torque hinge 1075a.

The camera housing 1075 is mounted on the arm 1074 with the torque hinge 1075a. For example, the camera housing 1075 is mounted on the arm 1074 so as to be rotatable within a tilt angle $\theta 3$ of approximately 100
30 degrees toward the front side of the transmission terminal 10 and approximately 90 degrees toward the rear side of the transmission terminal 10 when the angle of 0 degrees is

defined as a state in which the camera housing 1075 and the arm 1074 are arranged in a straight line.

As illustrated in Fig. 5, the transmission terminal 10 includes a central processing unit (CPU) 101 that controls overall operation of the transmission terminal 10, a read only memory (ROM) 102 that stores therein a program used to drive the CPU 101 such as an initial program loader (IPL), a random access memory (RAM) 103 used as a working area of the CPU 101, a flash memory 104 that stores therein various types of data such as the transmission terminal control program, the image data, and the sound data, a solid state drive (SSD) 105 that controls reading of various types of data from or writing various types of data into the flash memory 104 under the control of the CPU 101, a media drive 107 that controls reading of data from or writing (storing) of data into a recording medium 106 such as a flash memory, the operation button 108 operated when a destination of the transmission terminal 10 is selected, for example, the power switch 109 that switches ON and OFF of a power supply of the transmission terminal 10, and a network interface (I/F) 111 that performs data transmission by utilizing the transmission network 2.

The transmission terminal 10 further includes the built-in camera 112 that images a subject and acquires the image data under the control of the CPU 101, an image capturing device I/F 113 that controls driving of the camera 112, the microphone 114 that serves as a built-in sound collector receiving sounds, the built-in speaker 115 that outputs sounds, a sound input-output I/F 116 that processes input and output of a sound signal between the microphone 114 and the speaker 115 under the control of the CPU 101, a display I/F 117 that transmits image data to the display 120 externally mounted under the control of the CPU

101, an external device connection I/F 118 that connects various external devices, and a bus line 110 that electrically connects the above-described components, such as an address bus or a data bus.

5 The display 120 is a display device including liquid crystal or organic EL by which images of subjects and operation icons, for example, are displayed. The display 120 is coupled to the display I/F 117 with a cable 120c. The cable 120c may be an analog RGB (VGA) signal cable, a
10 component video cable, an HDMI high-definition multimedia interface (HDMI) signal cable, or a digital video interactive (DVI) signal cable.

 The camera 112 includes a lens and a solid state image capturing device that converts light into charges so as to
15 generate an electrically available image of a subject. As the solid state image capturing device, a CMOS or a CCD is used, for example.

 The external device connection I/F 118 can couple an external device such as an external camera, an external
20 microphone, or an external speaker with a universal serial bus (USB) cable, for example.

 When an external camera is coupled to the external device connection I/F 118, the CPU 101 drives the external camera prior to the built-in camera 112. When an external
25 microphone or an external speaker is coupled to the external device connection I/F 118, the CPU 101 drives the external microphone and the external speaker prior to the built-in microphone 114 and the built-in speaker 115.

 The recording medium 106 is attachable to and
30 detachable from the transmission terminal 10. An electrically erasable and programmable ROM (EEPROM) may be used for the transmission terminal 10, for example, as a non-volatile memory from which data is read or into which

data is written under the control of the CPU 101, instead of the flash memory 104.

The transmission terminal control program may be recorded into a computer readable recording medium such as
5 the recording medium 106 in an installable format or an executable format and distributed. The transmission terminal control program may be stored in the ROM 102 instead of the flash memory 104.

As illustrated in Fig. 6, the transmission management
10 apparatus 50 includes a CPU 201 that controls the overall operation of the transmission management apparatus 50, a ROM 202 that stores therein a program used to drive the CPU 201 such as an IPL, a RAM 203 that is used as a working area of the CPU 201, the HD 204 that stores therein various
15 types of data such as the transmission management program, an HDD (Hard Disk Drive) 205 that controls reading of various types of data from or writing of various types of data into the HD 204 under the control of the CPU 201, a media drive 207 that controls reading data from or writing
20 (storing) data into a recording medium 206 such as a flash memory, a display 208 that displays various types of information such as a cursor, menus, windows, characters, or images, a network I/F 209 that performs data transfer by utilizing the transmission network 2, a keyboard 211
25 provided with a plurality of keys for inputting characters, numerical values, and various instructions, a mouse 212 that is used to select and execute various instructions, select items to be processed, and move the cursor, a compact disc read only memory (CD-ROM) drive 214 that
30 controls reading of various types of data from or writing of various types of data into a CD-ROM 213 as an example of an attachable-detachable recording medium, and a bus line 210 that electrically connects the above-described

components, such as an address bus or a data bus.

The transmission management program may be recorded into a computer readable recording medium such as the recording medium 206 and the CD-ROM 213 in an installable
5 format or an executable format and distributed. The transmission management program may be stored in the ROM 202 instead of the HD 204.

The relaying apparatus 30 has the same hardware structure as that of the transmission management apparatus
10 50. The description thereof is, thus, omitted. The HD 204 stores therein the relaying apparatus program that controls the relaying apparatus 30.

Also in this case, the relaying apparatus program may be recorded into a computer readable recording medium such
15 as the recording medium 206 and the CD-ROM 213 in an installable format or an executable format and distributed. The relaying apparatus program may be stored in the ROM 202 instead of the HD 204.

The program supply apparatus 90 has the same hardware structure as that of the transmission management apparatus
20 50. The description thereof is, thus, omitted. The HD 204 stores therein a program supply apparatus program that controls the program supply apparatus 90.

Also in this case, the program supply apparatus
25 program may be recorded into a computer readable recording medium such as the recording medium 206 and the CD-ROM 213 in an installable format or an executable format and distributed. The program supply apparatus program may be stored in the ROM 202 instead of the HD 204.

30 As the above-described computer readable recording medium, a compact disc recordable (CD-R), a digital versatile disk (DVD), or a Blue-ray disc is applicable, for example.

<<Functional structure of embodiment>>

As illustrated in Fig. 7, the transmission terminal 10, the relaying apparatus 30, and the transmission management apparatus 50 are coupled such that they can transmit data through the transmission network 2. The program supply apparatus 90 illustrated in Fig. 1 is omitted in Fig. 7 because the program supply apparatus 90 does not directly relate to data transmission in a video conference.

<Functional structure of transmission terminal>

10 The transmission terminal 10 includes a transmitting-receiving unit 11, an operation input reception unit 12, a login request unit 13, an image capturing unit 14, a sound input unit 15a, a sound output unit 15b, a display control unit 17, and a storage-read processing unit 19. The above-
15 described components are achieved by the CPU 101 that executes the transmission terminal control program loaded on the RAM 103 from the flash memory 104. The transmission terminal 10 includes a storage unit 1000 that is structured by the RAM 103 and the flash memory 104.

20 Functional structures of transmission terminal

The transmitting-receiving unit 11, which is achieved by the CPU 101 and the network I/F 111, transmits and receives various types of data and information between itself and other transmission terminals 10 or the
25 apparatuses 30, 50, and 90 through the transmission network 2. The transmitting-receiving unit 11 functions as the transmitting unit and the receiving unit of the transmission terminal 10.

The transmitting-receiving unit 11 starts receiving
30 state information indicating the states of the transmission terminals 10 that are candidates of a connecting destination in a video conference from the transmission management apparatus 50 before starting the video

conference with a desired destination terminal.

The state information indicates not only an operation state of whether each transmission terminal 10 is online or offline but also a detailed operation state such as whether
5 each transmission terminal 10 is online and transmission is enabled or whether each transmission terminal 10 is online and in a transmission operation.

In addition, the state information indicates not only the operation state of each transmission terminal 10 but
10 also various states in the transmission terminal 10. For example, a state in which the cable 120c is come off from the transmission terminal 10, a state in which the transmission terminal 10 outputs sounds but no images, and a state in which the transmission terminal 10 outputs no
15 sounds (MUTE). For easy understanding, a case is described in which the state information indicates the operation state of each transmission terminal 10, in the following descriptions.

The operation input reception unit 12, which is
20 achieved by the CPU 101, the operation button 108, and the power switch 109, receives various types of inputs from a user. For example, once a user turns on the power switch 109, the operation input reception unit 12 receives the power ON operation and causes the power supply of the
25 transmission terminal 10 to be turned on.

The login request unit 13, which is achieved by the CPU 101, once the power ON operation is received, transmits login request information indicating a request for login and the current IP address of the transmission terminal 10
30 to the transmission management apparatus 50 from the transmitting-receiving unit 11 through the transmission network 2.

When the user switches the power switch 109 from the

ON state to the OFF state, the operation input reception unit 12 completely turns off the power supply of the transmission terminal 10 after the transmitting-receiving unit 11 transmits the state information indicating that the power supply is to be turned off to the transmission management apparatus 50. As a result, the transmission management apparatus 50 can grasp the fact that the power supply of the transmission terminal 10 has been turned off from the ON state.

10 The image capturing unit 14, which is achieved by the CPU 101, the camera 112, and the image capturing device I/F 113, images a subject and outputs the resulting image data to the transmitting-receiving unit 11. The camera 112 functions as an imaging apparatus and the image capturing device I/F 113 functions as an image data input unit.

15 The sound input unit 15a, which is achieved by the CPU 101 and the sound input-output I/F 116, functions as a sound data input unit. The sound input unit 15a, to which a sound signal representing a sound collected by the microphone 114 is input, converts the received sound signal into sound data.

20 The sound output unit 15b, which is achieved by the CPU 101 and the sound input-output I/F 116, converts sound data into a sound signal and outputs the converted sound signal to the speaker 115 so as to cause the speaker 115 to output a sound.

25 The display control unit 17, which is achieved by the CPU 101 and the display I/F 117, combines pieces of image data that have different resolutions and are received by the transmitting-receiving unit 11, and transmits the combined image data to the display 120 so as to cause the display 120 to display an image represented by the image data thereon.

The display control unit 17 transmits information relating to a destination list received by the transmitting-receiving unit 11 from the transmission management apparatus 50 to the display 120 so as to cause
 5 the display 120 to display the destination list thereon.

The storage-read processing unit 19, which is achieved by the CPU 101 and the SSD 105, stores various types of data in the storage unit 1000 and reads various types of data stored in the storage unit 1000.

10 The storage unit 1000 stores therein an identifier (hereinafter referred to as a "terminal ID") and a password for identifying the transmission terminal 10, for example. In addition, the storage unit 1000 is also used as a receiving buffer for image data and sound data that are
 15 received when a video conference is held with a destination terminal.

The terminal ID in the embodiment indicates information used to uniquely identify the transmission terminal 10, such as languages, characters, symbols, or
 20 various signs. The terminal ID may be information obtained by combining at least two of the languages, characters, symbols, and various signs.

<Functional structure of transmission management apparatus>

The transmission management apparatus 50 includes a
 25 transmitting-receiving unit 51, a terminal authentication unit 52, a state management unit 53, a terminal extraction unit 54, a terminal state acquisition unit 55, and a storage-read processing unit 59. The above-described components are achieved by the CPU 201 that executes the
 30 transmission management program loaded on the RAM 203 from the HD 204. The transmission management apparatus 50 includes a storage unit 5000 composed of the HD 204.

Terminal authentication management table

In the storage unit 5000, a terminal authentication management DB 5002 having a terminal authentication management table illustrated in Fig. 8 is structured. In the terminal authentication management table, passwords are managed in association with the respective terminal IDs of all of the transmission terminals 10 managed by the transmission management apparatus 50. For example, the terminal authentication management table illustrated in Fig. 8 indicates that the terminal ID of the transmission terminal 10aa is "01aa" and the password of the transmission terminal 10aa is "aaaa".

Terminal management table

In the storage unit 5000, a terminal management DB 5003 having a terminal management table illustrated in Fig. 9 is structured. The terminal management DB 5003 functions as a terminal management table storage unit.

In the terminal management table, an identification name of the transmission terminal 10 (hereinafter referred to as a "terminal name"), an operation state of the transmission terminal 10, a receiving date at which the login request information to login the transmission system 1 is received by the transmission management apparatus 50, and the IP address of the transmission terminal 10 are managed in association with each other for each terminal ID of the transmission terminals 10.

For example, the terminal management table illustrated in Fig. 9 indicates that the terminal name is "AA terminal, Tokyo business office, Japan", the operation state is "online (transmission is enabled)", the data at which the login request information was received by the transmission management apparatus 50 is "13:40 on November 10, 2009", and the IP address is "1.2.1.3" for the transmission terminal 10aa having the terminal ID of "01aa".

The terminal ID of the terminal management table is uniquely allocated when the transmission terminal 10 is registered in the transmission system 1. The terminal name is registered or changed by an administrator of the transmission management apparatus 50. The terminal name may be registered or changed in response to a request made from the transmission terminal 10 to the transmission management apparatus 50.

The operation state of "online (transmission is enabled)" indicates that the transmission terminal 10 has logged in the transmission system 1 but is not attending a video conference. The operation state of "online (in transmission)" indicates that the transmission terminal 10 has logged in the transmission system 1 and is attending a video conference. The operation state of "offline" indicates that the transmission terminal 10 has not logged in the transmission system 1.

Destination list management table

Furthermore, in the storage unit 5000, a destination list management DB 5004 having a destination list management table illustrated in Fig. 10 is structured. The destination list management DB 5004 functions as a destination list management table storage unit.

In the destination list management table, all of the terminal IDs of the destination terminals registered as the candidates of the destination terminal are managed in association with the terminal ID of the request source terminal that requests a start of a video conference.

For example, the destination list management table illustrated in Fig. 10 indicates that the candidates of the destination terminal to which the transmission terminal 10aa having the terminal ID of "01aa" requests a start of a video conference are the transmission terminal 10ab having

the terminal ID of "01ab", the transmission terminal 10ba having the terminal ID of "01ba", and the transmission terminal 10db having the terminal ID of "01db". The candidate of the destination terminal is added or deleted in response to a request made from the transmission terminal 10 to the transmission management apparatus 50. Functional structures of transmission management apparatus

The transmitting-receiving unit 51, which is achieved by the CPU 201 and the network I/F 209, transmits and receives various types of data and information between itself and other transmission terminals 10 or the apparatuses 30 and 90 through the transmission network 2.

The terminal authentication unit 52, which is achieved by the CPU 201, searches the terminal authentication management DB 5002 of the storage unit 5000 by using the terminal ID and the password that are included in the login request information received through the transmitting-receiving unit 51 as searching keys, and performs terminal authentication by determining whether the same terminal ID and password are managed in the terminal authentication management DB 5002.

The state management unit 53, which is achieved by the CPU 201, stores the operation state, the receiving date at which the transmission management apparatus 50 has received the login request information, and the IP address in the terminal management DB 5003 (refer to Fig. 9) and manages them in association with the terminal ID of the request source terminal so as to manage the operation state of the request source terminal that makes the login request.

The state management unit 53 changes the operation state of the transmission terminal 10 in the terminal management DB 5003 (refer to Fig. 9) from online to offline in accordance with the state information that is sent from

the transmission terminal 10 and indicates that the power supply is to be turned off when a user turns off the power switch 109 of the transmission terminal 10 from the ON state.

5 The terminal extraction unit 54, which is achieved by the CPU 201, searches the destination list management DB 5004 (refer to Fig. 10) by using the terminal ID of the request source terminal that has made the login request as a searching key, and extracts the terminal IDs of the
10 candidates of the destination terminal of the request source terminal.

 In addition, the terminal extraction unit 54 searches the destination list management DB 5004 (refer to Fig. 10) by using the terminal ID of the request source terminal
15 that has made the login request as a searching key, and extracts the terminal IDs of the other request source terminals that register the terminal ID of the request source terminal as the candidate of the destination terminal thereof.

20 The terminal state acquisition unit 55, which is achieved by the CPU 201, searches the terminal management DB 5003 (refer to Fig. 9) by using the terminal IDs of the candidates of the destination terminal extracted by the terminal extraction unit 54 as searching keys and reads the
25 operation state for each detected terminal ID.

 As a result, the terminal state acquisition unit 55 can acquire the operation states of the candidates of the destination terminal of the request source terminal that has made the login request. Furthermore, the terminal
30 state acquisition unit 55 searches the terminal management DB 5003 by using the terminal IDs extracted by the terminal extraction unit 54 as searching keys and acquires the operation state of the request source terminal that has

made the login request.

The storage-read processing unit 59, which is achieved by the CPU 201 and the HDD 205, stores various types of data in the storage unit 5000 and reads various types of data stored in the storage unit 5000.

<<Processing or operation of embodiment>>

Operation of the transmission system 1 according to the embodiment is described below. Fig. 11 is a sequence diagram illustrating preparatory stage operation until the transmission terminal 10 reaches a preparatory state to attend a video conference. Fig. 11 illustrates an example in which the transmission terminal 10aa reaches the preparatory state. In the preparatory stage operation, various types of information are transmitted and received in the management information session SEI (refer to Fig. 2).

When a user of the transmission terminal 10aa turns on the power switch 109 of the transmission terminal 10aa, the operation input reception unit 12 receives the power ON operation and causes the power supply to be turned on (step S21). The login request unit 13, once the power ON operation is received, transmits the login request information indicating a request for login to the transmission management apparatus 50 from the transmitting-receiving unit 11 of the transmission terminal 10aa through the transmission network 2 (step S22).

The login request information includes the terminal ID and the password to identify the transmission terminal 10aa serving as a login request source. The terminal ID and the password are read from the storage unit 1000 by the storage-read processing unit 19.

Upon receiving the login request information transmitted from the transmission terminal 10aa, the transmission management apparatus 50 can grasp the IP

address of the transmission terminal 10aa serving as a transmission side.

Then, the terminal authentication unit 52 of the transmission management apparatus 50 searches the terminal authentication management DB 5002 of the storage unit 5000 (refer to Fig. 8) by using the terminal ID and the password that are included in the login request information received through the transmitting-receiving unit 51 as searching keys, and performs terminal authentication by determining whether the same terminal ID and password as the searching keys are managed in the terminal authentication management DB 5002 (step S23).

If the terminal authentication unit 52 determines that the same terminal ID and password as the searching keys are not managed, i.e., if it is determined that the login request is not transmitted from the transmission terminal 10 having use authority, the transmitting-receiving unit 51 transmits authentication result information indicating the authentication result obtained by the terminal authentication unit 52 to the transmission terminal 10aa that has made the login request through the transmission network 2. Thereafter, the operation of the preparatory stage ends.

On the other hand, if the terminal authentication unit 52 determines that the same terminal ID and password as the searching keys are managed, i.e., it is determined that the login request is transmitted from the transmission terminal 10 having use authority, the state management unit 53 stores the terminal ID, the operation state, the receiving date of the login request information, and the IP address of the transmission terminal 10aa in the terminal management DB 5003 (refer to Fig. 9) in association with one another (step S24).

As a result, as illustrated in Fig. 9, the terminal management table manages the terminal ID "01aa", the operation state "online (transmission is enabled)", the receiving date "13:40 on November 10, 2009", and the IP address "1.2.1.3" of the transmission terminal 10aa in association with one another.

Then, the transmitting-receiving unit 51 of the transmission management apparatus 50 transmits the authentication result information indicating the authentication result obtained by the terminal authentication unit 52 to the transmission terminal 10aa that has made the login request through the transmission network 2 (step S25).

Then, the terminal extraction unit 54 of the transmission management apparatus 50 searches the destination list management DB 5004 (refer to Fig. 10) by using the terminal ID "01aa" of the transmission terminal 10aa that has made the login request as a searching key, and extracts the terminal IDs of the candidates of the destination terminal of the transmission terminal 10aa (step S26).

In this case, the terminal IDs "01ab", "01ba", and "01db" of the transmission terminals 10ab, 10ba, and 10db that are the destination terminals of the terminal ID "01aa" of the transmission terminal 10aa are extracted.

Then, the terminal state acquisition unit 55 of the transmission management apparatus 50 searches the terminal management DB 5003 (refer to Fig. 9) by using the terminal IDs "01ab", "01ba", and "01db" of the candidates of the destination terminal extracted by the terminal extraction unit 54 as searching keys and reads the operation states of the terminal IDs extracted by the terminal extraction unit 54 as "offline", "online (transmission is enabled)", and

"online (in transmission)". As a result, the terminal state acquisition unit 55 acquires the respective operation states of the transmission terminals 10ab, 10ba, and 10db (step S27).

5 Then, the transmitting-receiving unit 51 of the transmission management apparatus 50 transmits, to the transmission terminal 10aa through the transmission network 2, the terminal IDs "01ab", "01ba", and "01db" used as the searching keys at step S27, and the destination state
10 information including the operation states of the respective transmission terminals 10ab, 10ba, and 10db corresponding to the respective terminal IDs, which are "offline", "online (transmission is enabled)", and "online (in transmission)" (step S28).

15 As a result, the transmission terminal 10aa can grasp the current operation states, each of which is "offline", "online (transmission is enabled)", and "online (in transmission)", of the transmission terminals 10ab, 10ba, and 10db that are the candidates of the destination
20 terminal.

 Furthermore, the terminal extraction unit 54 of the transmission management apparatus 50 searches the destination list management DB 5004 (refer to Fig. 10) by using the terminal ID "01aa" of the transmission terminal
25 10aa that has made the login request as a searching key, and extracts the terminal IDs of the other transmission terminals that register the terminal ID "01aa" of the transmission terminal 10aa as the candidate of the destination terminal (step S29). For example, in the
30 destination list management table illustrated in Fig. 10, the terminal IDs "01ab", "01ba", and "01db" are extracted.

 Then, the state management unit 53 of the transmission management apparatus 50 searches the terminal management DB

5003 (refer to Fig. 9) by using the terminal ID "01aa" of the transmission terminal 10aa that has made the login request as a searching key and acquires the operation state, which is "online (transmission is enabled)", of the transmission terminal 10aa that has made the login request (step S30).

Then, the transmitting-receiving unit 51 of the transmission management apparatus 50 transmits destination state information including the terminal ID "01aa" of the transmission terminal 10aa and the operation state "online (transmission is enabled)" that are acquired at step S30 to the transmission terminals 10ba and 10db each operation state of which is "online" in the terminal management DB 5003 (refer to Fig. 9) among the transmission terminals 10ab, 10ba, and 10db that are identified with the terminal IDs "01ab", "01ba", and "01db" extracted at step S29 (step S31-1 and step S31-2).

When transmitting the destination state information to the transmission terminals 10ba and 10db, the transmitting-receiving unit 51 refers to the IP addresses of the transmission terminals managed in the terminal management table illustrated in Fig. 9 using the terminal IDs "01ba" and "01db".

As a result, the terminal ID "01aa" and the operation state "online (transmission is enabled)" of the transmission terminal 10aa that has made the login request can be transmitted to the transmission terminals 10db and 10ba that can perform transmission to the transmission terminal 10aa that has made the login request as the destination.

When step S28 of the preparatory stage operation is complete, the display control unit 17 of the transmission terminal 10aa highlights, on the display 120, the

information of the terminals attending the video conference,
 i.e., the transmission terminal 10db operation state of
 which is "online (in transmission)" or "online
 (transmission is enabled)", from the information of the
 5 destination list displayed on the display 120, for example.
 As a result, the display control unit 17 allows a user to
 recognize the transmission terminal 10 attending or capable
 of attending the video conference.

Fig. 12 is a sequence diagram illustrating conference
 10 attendance operation until the transmission terminal 10
 reaches an attendance state in which the transmission
 terminal 10 is attending a video conference. Fig. 12
 illustrates an example in which the transmission terminal
 10aa reaches the attendance state. In the conference
 15 attendance operation, various types of information are
 transmitted and received in the management information
 session SEI (refer to Fig. 2).

Once a user presses the operation button 108 to select
 an attendance at a video conference, the operation input
 20 reception unit 12 receives a request for an attendance at
 the video conference held with the transmission terminal
 10db (step S41).

In response to the request, the transmitting-receiving
 unit 11 of the transmission terminal 10aa transmits
 25 attendance request information indicating the attendance at
 the video conference and including the terminal ID "01aa"
 of the transmission terminal 10aa and the terminal ID
 "01db" of the transmission terminal 10db to the
 transmission management apparatus 50 (step S42).

30 As a result, the transmitting-receiving unit 51 of the
 transmission management apparatus 50 receives the
 attendance request information and can confirm the IP
 address "1.2.1.3" of the transmission terminal 10aa serving

as a transmission source.

Then, the state management unit 53 of the transmission management apparatus 50 searches by using the terminal ID "01aa" of the transmission terminal 10aa included in the attendance request information as a searching key and sets
5 "online (in transmission)" as the operation state of the transmission terminal 10aa that has made the attendance request (step S43).

Then, the transmitting-receiving unit 51 of the
10 transmission management apparatus 50 transmits start request information including the terminal ID "01aa" of the transmission terminal 10aa to the transmission terminal 10db through the transmission network 2 (step S44). As a result, the transmission terminal 10db can grasp which
15 transmission terminal 10 has requested the attendance at the video conference.

In the terminal management DB 5003 illustrated in Fig. 9, the operation state of the transmission terminal 10cb is "online (in transmission)". Accordingly, the transmitting-
20 receiving unit 51 of the transmission management apparatus 50 transmits the start request information including the terminal ID "01aa" of the transmission terminal 10aa to the transmission terminal 10cb through the transmission network 2. Detailed description thereof is, however, omitted
25 herein for easy understanding of the invention.

Then, the transmission terminal 10db transmits receiving completion information indicating the completion of the receiving of the start request information to the transmission management apparatus 50 from the transmitting-
30 receiving unit 11 through the transmission network 2 (step S45).

Then, the transmitting-receiving unit 51 of the transmission management apparatus 50 transmits relay start

request information indicating a request for starting a relay to the relaying apparatus 30 through the transmission network 2 (step S46). The relay start request information includes the IP address "1.2.1.3" of the transmission terminal 10aa and the IP address "1.3.2.4" of the transmission terminal 10db.

As a result, the relaying apparatus 30 establishes a session for transmitting three pieces of image data of low resolution, medium resolution, and high resolution and sound data between the transmission terminals 10aa and 10db (step S47). In this way, the transmission terminal 10aa can attend the video conference held with the transmission terminal 10db.

Meanwhile, the transmitting-receiving unit 51 of the transmission management apparatus 50 casts terminal state change information including the terminal ID "01aa" and the operation state "online (in transmission)" of the transmission terminal 10aa into each transmission terminal 10 registered in the terminal management DB 5003 (refer to Fig. 9) (step S48). As a result, each transmission terminal 10 having received the terminal state change information can store and display the operation state of the transmission terminal 10aa having the terminal ID "01aa" if needed.

Fig. 13 is a sequence diagram illustrating data transmission operation between the transmission terminals 10. In the data transmission operation illustrated in Fig. 13, image data and sound data are transmitted and received in the image/sound data session SED (refer to Fig. 2).

Once the session is established between the transmission terminals 10aa and 10db as described with reference to Fig. 12, the transmission terminal 10aa transmits, to the relaying apparatus 30 through the

transmitting-receiving unit 51, the image data taken by the image capturing unit 14 and sound data into which the sound input unit 15a converts a received sound signal (step S60).

Upon receiving the image data and the sound data from
5 the transmission terminal 10aa, the relaying apparatus 30 transmits the received image data and sound data to each of the transmission terminals 10aa and 10db that are attending the video conference (step S61-1 and step S61-2).

Upon receiving the image data and the sound data from
10 the relaying apparatus 30, each of the transmission terminals 10aa and 10db allows the display control unit 17 to cause the display 120 to display the image represented by the received image data and allows the sound output unit 15b to cause the speaker 115 to output the sound
15 represented by the received sound data (step S62-1 and step S62-2).

Then, the transmission terminal 10db transmits, to the relaying apparatus 30 through the transmitting-receiving unit 51, image data taken by the image capturing unit 14
20 and sound data into which the sound input unit 15a converts a received sound signal (step S63).

Upon receiving the image data and the sound data from the transmission terminal 10db, the relaying apparatus 30 transmits the received image data and sound data to each of
25 the transmission terminals 10aa and 10db that are attending the video conference (step S64-1 and step S64-2).

Upon receiving the image data and the sound data from the relaying apparatus 30, each of the transmission terminals 10aa and 10db allows the display control unit 17
30 to cause the display 120 to display the image represented by the received image data and allows the sound output unit 15b to cause the speaker 115 to output the sound represented by the received sound data (step S65-1 and step

S65-2).

In this way, the transmission terminals 10aa and 10db can have a video conference therebetween through the relaying apparatus 30. Fig. 13 illustrates two
5 transmission terminals 10, i.e., the transmission terminals 10aa and 10db, attending the video conference for easy understanding. Even if the number of transmission terminals 10 attending the video conference is equal to or more than three, image data and sound data are transmitted
10 in the same manner as the data transmission operation illustrated in Fig. 13.

An image display of the transmission terminal 10 is described below. In the embodiment, the display control unit 17 has two display modes of an all-image display mode
15 and an information display mode. Switching of the display modes is performed in accordance with operation of the operation button 108, for example.

In the all-image display mode as illustrated in Fig. 14, the display control unit 17 of the transmission
20 terminal 10 causes the display 120 to display all of the images transmitted from each transmission terminal 10 attending a video conference.

In the display screen illustrated in Fig. 14, a first image area 500 having a relatively large area and a
25 plurality of second image areas 510 each having a relatively small area are allocated. For example, images represented by pieces of image data transmitted from the transmission terminals 10 attending the video conference are displayed in the second image areas 510 while an image
30 represented by image data of a main transmission terminal among the transmission terminals 10 attending the video conference is displayed in the first image area 500.

For example, the display control unit 17 specifies a

transmission terminal that is the transmission source of sound data representing the voice in the received sound data as a major terminal among the transmission terminals 10 attending the video conference. A voice stream is
5 detected for each piece of the received sound data. The sound data representing the voice is sound data determined that it has the voice stream. The detection of the voice stream can be achieved by using known techniques (e.g., refer to NIIMI, Yasuhisa. Speech Recognition. Japan.
10 Kyoritsu Publishing, Co. 1979. pages 68 to 72).

On the other hand, in the information display mode as illustrated in Fig. 15, the display control unit 17 of the transmission terminal 10 causes the display 120 to display terminal information including at least the terminal names
15 and terminal IDs of the transmission terminals 10 attending the video conference.

To the display screen illustrated in Fig. 15, an image display area 520 for displaying an image and a terminal information display area 530 for displaying the terminal
20 information are allocated. For example, in the terminal information display area 530, pieces of the terminal information of the transmission terminals 10 attending the video conference are displayed as a list.

The terminal information having no terminal name
25 displayed among the pieces of terminal information displayed in the list represents the transmission terminal 10 that is not registered as the candidate of the destination terminal of the terminal serving as a transmission terminal in the destination list management DB
30 5004 (refer to Fig. 10).

For example, in the display screen illustrated in Fig. 15, the terminal name of the transmission terminal 10db is displayed because the transmission terminal 10db is

registered in the destination list management DB 5004 as the candidate of the destination terminal of the transmission terminal 10aa while the terminal name of the transmission terminal 10cb is not displayed because the transmission terminal 10cb is not registered in the destination list management DB 5004 as the candidate of the destination terminal of the transmission terminal 10aa.

In the image display area 520, an image represented by image data of a major transmission terminal is displayed among the transmission terminals 10 attending the video conference. For example, the display control unit 17 specifies a transmission terminal that is the transmission source of sound data representing the voice in the received sound data, as a major transmission terminal among the transmission terminals 10 attending the video conference. The display control unit 17 may specify a selected transmission terminal as a major transmission terminal when the operation input reception unit 12 receives information indicating that a certain transmission terminal is selected among the transmission terminals 10 attending the video conference in accordance with a user's operation of the operation button 108.

Fig. 16 is a sequence diagram illustrating terminal information display operation in which terminal information to be displayed in the terminal information display area 530 is displayed in the terminal information display area 530 when the display mode is switched to the information display mode in the transmission terminal 10. In the terminal information display operation illustrated in Fig. 16, various types of information are transmitted and received in the management information session SEI.

First, the transmission terminal 10 transmits a terminal information request signal indicating a request of

the terminal information of the transmission terminal attending a video conference to the transmission management apparatus 50 (step S70). Upon receiving the terminal information request signal, the terminal state acquisition unit 55 of the transmission management apparatus 50 searches the terminal management DB 5003 (refer to Fig. 9) of the storage unit 5000 by using the IP address of the transmission source of the terminal information request signal as a searching key and acquires the terminal ID of the transmission terminal that transmits the terminal information request signal (step S71).

Then, the terminal state acquisition unit 55 searches the terminal management DB 5003 for the terminal ID and the terminal name with the operation condition "online (in transmission)" (step S72). In the embodiment, the terminal state acquisition unit 55 detects the terminal IDs "01aa", "01cb", and "01db". The operation state of the transmission terminal having the terminal ID "01aa" is set as "online (in transmission)" at step S43.

Then, the terminal state acquisition unit 55 searches the destination list management DB 5004 (refer to Fig. 10) of the storage unit 5000 by using the terminal ID detected at step S71 ("01aa" in the embodiment) as a searching key and acquires the terminal IDs of the candidates of the destination terminal of the transmission source of the terminal information request signal (step S73).

For example, when the terminal ID of the transmission terminal that transmits the terminal information request signal is "01aa", the terminal IDs "01ab", "01ba", and "01db" are acquired by the terminal state acquisition unit 55.

Then, the terminal state acquisition unit 55 determines whether each of the terminal IDs acquired at

step S72 is included in the terminal ID of the transmission source of the terminal information request signal or the terminal IDs acquired at step S73. If it is determined that the terminal ID is included, the terminal state acquisition unit 55 causes the transmitting-receiving unit 51 to reply the included terminal ID and the terminal name to the transmission source of the terminal information request signal. If it is determined that the terminal ID is not included, the terminal state acquisition unit 55 causes the transmitting-receiving unit 51 to reply only the terminal ID to the transmission source of the terminal information request signal (step S74).

For example, when the terminal ID of the transmission terminal that transmits the terminal information request signal is "01aa", the terminal IDs "01aa" and "01db" and the terminal names "AA terminal, Tokyo business office, Japan" and "DB terminal, Washington, D.C. business office, USA" of the transmission terminals 10aa and 10db, and the terminal ID "01cb" of the transmission terminal 10cb are transmitted to the transmission terminal 10aa that is the transmission source of the terminal information request signal.

The display control unit 17 of the transmission terminal 10 having received the reply displays the reply contents in the terminal information display area 530 as the display screen illustrated in Fig. 15 (step S75).

<<Major effect of embodiment>>

As described above, the transmission system 1 according to the embodiment causes the transmission management apparatus 50 to reply the information of the transmission terminals 10 attending a video conference. As a result, a user of each of the transmission terminals 10 can grasp which transmission terminal 10 is attending the

video conference regardless of the number of transmission terminals 10 attending the video conference.

Accordingly, the transmission system 1 enables a user to know the other party at a video conference without
5 requiring the user to ask the other party in conversation. As a result, time taken for the video conference can be reduced. In the transmission system 1, the terminal name of the transmission terminal that is not registered as the destination is not displayed, enabling the attendance of an
10 unknown party at the video conference to be informed. As a result, the video conference can proceed with careful attention to discussion contents.

In the transmission system 1, image data of a major transmission terminal remains displayed even when terminal
15 information is displayed on the display 120. As a result, a user can grasp a situation of a site that currently leads the video conference.

Supplemental explanation of embodiment

The relaying apparatus 30, the transmission management
20 apparatus 50, and the program supply apparatus 90 in the embodiment may be structured by a single computer. The units (function or means) of them may be divided and the divided units may be structured by a plurality of computers each allocated for any unit.

25 When the program supply apparatus 90 is structured by a single computer, a program transmitted by the program supply apparatus 90 may be transmitted as a plurality of divided modules or transmitted without being divided.

When the program supply apparatus 90 is structured by
30 a plurality of computers, a program may be transmitted from the computers as a plurality of divided modules.

The recording medium, such as CD-ROM, in which the transmission terminal control program, the relaying

apparatus program, and the transmission management program of the embodiment are stored, the HD 204 that stores therein the programs, and the program supply apparatus 90 including the HD 204 are used as program products when the transmission terminal control program, the relaying apparatus program, and the transmission management program are provided to a user and the like domestically or overseas.

As an example of quality of an image represented by image data relayed by the relaying apparatus 30, attention is paid on the resolution of the image represented by the image data and the resolution is managed. The image quality is not limited to the resolution. As other examples of quality, attention may be paid on depth of image quality of the image represented by the image data, a sampling frequency of sound in sound data, and a bit length of sound in sound data and the quality may be managed. Sound data may be transmitted and received by being divided into three pieces of data having different resolutions (high resolution, medium resolution, and low resolution).

In Fig. 9, the IP address of the transmission terminal 10 is managed. However, the item to be managed is not limited to the IP address. Any information can be used as long as it can be used to identify the transmission terminal 10 on the transmission network 2. For example, a fully qualified domain name (FQDN) of the transmission terminal 10 may be managed. In this case, the IP address corresponding to the FQDN is acquired by a known domain name system (DNS) server.

In the embodiment, the video conference system is described as an example of the transmission system 1. However, the transmission system 1 is not limited to be applied to the video conference system. The transmission

system 1 may be applicable to a telephone system such as an Internet Protocol (IP) telephone and an Internet telephone.

The transmission system 1 may be a car navigation system. In this case, the transmission terminal 10 on one side corresponds to a car navigation system mounted on a vehicle while the transmission terminal 10 on the other side corresponds to a management terminal or a management server of a management center that manages the car navigation, or another car navigation system mounted on another vehicle. In the transmission system 1, the transmission terminals 10 may be structured with cell phones.

In the embodiment, image data and sound data are described as examples of the content data. However, content data is not limited to the image data and the sound data. Touch data may be applicable. In this case, a sense of touch obtained by a user at a transmission terminal on one side is transmitted to another transmission terminal on the other side.

The content data may be olfactory (smell) data. In this case, an aroma (smell) at a transmission terminal on one side is transmitted to another transmission terminal on the other side. The content data may be at least one piece of image data, sound data, touch data, and olfactory data.

In the embodiment, the video conference is held by using the transmission system 1. However, the transmission system 1 is not limited to be used for the video conference. The transmission system 1 may be used for general conversations among family members or friends or information supply in one direction.

As described above, the embodiment enables users who use the respective transmission terminals to grasp which transmission terminal is attending a conference regardless

of the number of transmission terminals attending the conference.

Although the invention has been described with respect to specific embodiments for a complete and clear disclosure,
5 the appended claims are not to be thus limited but are to be construed as embodying all modifications and alternative constructions that may occur to one skilled in the art that fairly fall within the basic teaching herein set forth.

Docket No. 530808US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Yoshinaga KATO, et al.

SERIAL NO: New Application

GAU:

FILED: Herewith

EXAMINER:

FOR: TRANSMISSION MANAGEMENT APPARATUS

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

Commissioner:

Applicant(s) wish to disclose the following information.

REFERENCES

- ☒ The applicant(s) wish to make of record the reference(s) listed on the attached form PTO-1449 and/or accompanying documents from a corresponding foreign application. Copies of the listed reference(s) were filed or cited in parent application Serial No. 15/442,787, filed February 27, 2017, where required, as are either statements of relevancy, English translations of the categories of cited documents for foreign search reports or English translations of foreign Office Actions which provide the statement of relevancy for the foreign language references cited therein, or any readily available partial or full English translations of pertinent portions of any non-English language reference(s).
- ☐ Credit card payment is being made online (if electronically filed), or is attached hereto (if paper filed), in the amount required under 37 CFR §1.17(p).

CERTIFICATION

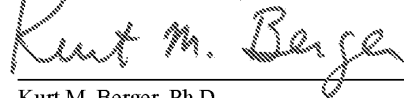
- ☐ Each item of information contained in this information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- ☐ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

DEPOSIT ACCOUNT

- ☒ Please charge any additional fees for the papers being filed herewith and for which no payment is enclosed herewith, or credit any overpayment to deposit account number 15-0030.

Respectfully submitted,

OBLON, McCLELLAND,
MAIER & NEUSTADT, L.L.P.



Kurt M. Berger, Ph.D.

Registration No. 51,461

Customer Number

22850

Tel. (703) 413-3000
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(OMMN 02/12)

Docket No. 530808US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INVENTOR(S) Yoshinaga KATO, et al.

SERIAL NO: New Application

ART UNIT:

FILING DATE: Herewith

EXAMINER:

FOR: TRANSMISSION MANAGEMENT APPARATUS

FEE TRANSMITTAL

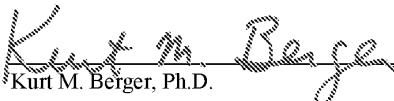
- ☐ No additional fee is required
- ☐ Small entity status of this application under 37 C.F.R. §1.9 and §1.27 is claimed.
- ☐ Track 1 Prioritized Examination

The Fee has been calculated as shown below:

FOR	NUMBER FILED	NUMBER EXTRA	RATE	CALCULATIONS
TOTAL CLAIMS	1 - 20 =	0	x \$100 =	\$0.00
INDEPENDENT CLAIMS	1 - 3 =	0	x \$460 =	\$0.00
UTILITY APPLICATION SIZE FEE	45* - 100 = (* 59 x .75)	0 (each addtl. 50 sheets over 100)	x \$400 =	\$0.00
☐ MULTIPLE DEPENDENT CLAIMS (If applicable)			+ \$820 =	\$0.00
☐ LATE FILING OF DECLARATION			+ \$160 =	\$0.00
☐ NON-ELECTRONIC FILING FEE			+ \$400 =	\$0.00
☒ FILING FEE (\$300.00)	☒ SEARCH FEE (\$660.00)	☒ EXAMINATION FEE (\$760.00)	BASIC FEES	\$1,720.00
TOTAL OF ABOVE CALCULATIONS				\$1,720.00
☐ REDUCTION BY 50% FOR FILING BY SMALL ENTITY				\$0.00
☐ FILING FEE REDUCED IF E-FILED – SMALL ENTITY			+ \$-75 =	\$0.00
☐ FILING IN NON-ENGLISH LANGUAGE			+ \$140 =	\$0.00
TOTAL				\$1,720.00

- ☐ Please charge Deposit Account No. **15-0030** in the amount of **\$0.00**
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- ☒ The Director is hereby authorized to charge any additional fees which may be required for the papers being filed herewith and for which no payment is enclosed herewith, or credit any overpayment to Deposit Account No. **15-0030**, with the **EXCEPTION** of deficiencies in fees for multiple dependent claims in new applications.

Submitted by:


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Electronic Patent Application Fee Transmittal				
Application Number:				
Filing Date:				
Title of Invention:		TRANSMISSION MANAGEMENT APPARATUS		
First Named Inventor/Applicant Name:		Yoshinaga KATO		
Filer:		Philippe Jean-Claude Signore/Abebech Hailemariam		
Attorney Docket Number:		530808US		
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
UTILITY APPLICATION FILING	1011	1	300	300
UTILITY SEARCH FEE	1111	1	660	660
UTILITY EXAMINATION FEE	1311	1	760	760
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				1720



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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO.	TOT CLAIMS	IND CLAIMS
16/903,713	06/17/2020	2414	1720	530808US	1	1

CONFIRMATION NO. 1733

FILING RECEIPT



0000000118021232

22850
OBLON, MCCLELLAND, MAIER & NEUSTADT, L.L.P.
1940 DUKE STREET
ALEXANDRIA, VA 22314

Date Mailed: 06/26/2020

Receipt is acknowledged of this non-provisional utility patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF FIRST INVENTOR, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection.

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Inventor(s)

Yoshinaga KATO, Kanagawa, JAPAN;
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Assignment For Published Patent Application

RICOH COMPANY, LTD, Tokyo, JAPAN

Power of Attorney: The patent practitioners associated with Customer Number 22850

Domestic Priority data as claimed by applicant

This application is a CON of 15/442,787 02/27/2017
which is a CON of 15/041,570 02/11/2016 PAT 9621848
which is a DIV of 13/989,665 05/24/2013 PAT 9307197
which is a 371 of PCT/JP12/55011 02/22/2012

Foreign Applications (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.)

JAPAN 2011-042365 02/28/2011 No Access Code Provided

JAPAN 2011-236251 10/27/2011 No Access Code Provided

Permission to Access Application via Priority Document Exchange: Yes

Permission to Access Search Results: Yes

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If Required, Foreign Filing License Granted: 06/25/2020

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 16/903,713**

Projected Publication Date: 10/01/2020

Non-Publication Request: No

Early Publication Request: No

Title

TRANSMISSION MANAGEMENT APPARATUS

Preliminary Class

370

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

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Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

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Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

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page 2 of 4

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Title 37, Code of Federal Regulations, 5.11 & 5.15

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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875						Application or Docket Number 16/903,713		
APPLICATION AS FILED - PART I								
(Column 1)		(Column 2)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY		
FOR	NUMBER FILED	NUMBER EXTRA	RATE(\$)	FEE(\$)		RATE(\$)	FEE(\$)	
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	300	
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A			N/A	660	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	760	
TOTAL CLAIMS (37 CFR 1.16(j))	1	minus 20 = *				x 100 =	0.00	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	1	minus 3 = *				x 460 =	0.00	
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						0.00	
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							0.00	
			TOTAL			TOTAL	1720	
* If the difference in column 1 is less than zero, enter "0" in column 2.								
APPLICATION AS AMENDED - PART II								
AMENDMENT A	(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY	OR OTHER THAN SMALL ENTITY
	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)
	Total (37 CFR 1.16(j))	*	Minus **	x	=		x	=
	Independent (37 CFR 1.16(h))	*	Minus ***	x	=		x	=
	Application Size Fee (37 CFR 1.16(s))							
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
			TOTAL ADD'L FEE			TOTAL ADD'L FEE		
AMENDMENT B	(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY	OR OTHER THAN SMALL ENTITY
	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)
	Total (37 CFR 1.16(j))	*	Minus **	x	=		x	=
	Independent (37 CFR 1.16(h))	*	Minus ***	x	=		x	=
	Application Size Fee (37 CFR 1.16(s))							
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
			TOTAL ADD'L FEE			TOTAL ADD'L FEE		
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.								



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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
16/903,713	06/17/2020	Yoshinaga KATO	530808US

CONFIRMATION NO. 1733

22850

OBLON, MCCLELLAND, MAIER & NEUSTADT, L.L.P.

1940 DUKE STREET

ALEXANDRIA, VA 22314

PUBLICATION NOTICE



OC000000120335668

Title:TRANSMISSION MANAGEMENT APPARATUS

Publication No.US-2020-0314383-A1

Publication Date:10/01/2020

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publicly available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently <http://www.uspto.gov/patft/>.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Public Records Division. The Public Records Division can be reached by telephone at (571) 272-3150 or (800) 972-6382, by facsimile at (571) 273-3250, by mail addressed to the United States Patent and Trademark Office, Public Records Division, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently <https://portal.uspto.gov/pair/PublicPair>. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

<i>Notice of References Cited</i>	Application/Control No. 16/903,713		Applicant(s)/Patent Under Reexamination KATO et al.	
	Examiner MARIA EL-ZOOBI		Art Unit 2652	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20100226546-A1	09-2010	Tanaka; Akifumi	H04N7/147	382/118
*	B	US-20070100944-A1	05-2007	Ford; Peter S.	H04L51/04	709/206
*	C	US-20120185685-A1	07-2012	VOLMAT; Alain	G06F21/572	713/2
	D					
	E					
	F					
	G					
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office
PTO-892 (Rev. 01-2001)

Notice of References Cited

Part of Paper No. 20210315

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 530808US		SERIAL NO. New Application 16/903713	
LIST OF REFERENCES CITED BY APPLICANT				APPLICANT Yoshinaga KATO, et al.			
				FILING DATE Herewith		GROUP 2652	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	5,402,418 A	03/28/1995	Yoji SHIBATA, et al.			
	AB	5,604,738 A	02/18/1997	Yoji SHIBATA, et al.			
	AC	5,970,054 A	10/19/1999	Yoji SHIBATA, et al.			
	AD	2006/0055771-A1	03-2006	Kies; Jonathan K.			
	AE	2008/0016156-A1	01-2008	Miceli; Sean			
	AF	2012/0300014-A1	11-2012	Krantz; Anton			
	AG	2013/0063542-A1	03-2013	Bhat; Raghurama			
	AH	2012/0182384-A1	07-2012	Anderson; Eric C.			
	AI	2011/0026517-A1	02-2011	Capuozzo; Giuseppe			
	AJ	2004/0001501 A1	01-2004	Delveaux, William J.			
	AK						
	AL						
	AM						
	AN						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES NO		
	AO	2012-075073	04/12/2012	Japan (with English abstract)			x
	AP	3308563	05/17/2002	Japan (corresponding to US 5,402,418 A, US 5,604,738 A and US 5,970,054 A)			x
	AQ	2006-005590	01/05/2006	Japan (with English abstract)			x
	AR	09-200723	07/31/1997	Japan (with English abstract)			x
	AS	2004-080349	03/11/2004	Japan (with English abstract)			x
	AT	10-164541	06/19/1998	Japan (with English abstract)			x
	AU	08-223550	08/30/1996	Japan (with English abstract)			x
	AV						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	AW	International Search Report issued April 3, 2012, in PCT/JP2012/055011, filed February 22, 2012					
	AX	NIIMI, Yasuhisa. Speech Recognition. Japan. Kyoritsu Publishing, Co. 1979. Pages 68 to 72					
	AY						
	AZ					☒ Additional References sheet(s) attached	
Examiner	/MARIA EL-ZOOBI/				Date considered	03/15/2021	
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /M.E/

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 530808US		SERIAL NO. New Application 9,307197	
LIST OF REFERENCES CITED BY APPLICANT				APPLICANT Yoshinaga KATO, et al.			
				FILING DATE Herewith		GROUP 2652	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	2008/002020 A1	01/03/2008	Woo-Young CHOI et al.			
	AB	2007/0100944 A1	05-2007	Ford; Peter S.			
	AC	2010/0226546 A1	09-2010	Tanaka; Akifumi			
	AD	2013/0117472 A1	05-2013	Sexton; Daniel White			
	AE	2012/0185685 A1	07-2012	VOLMAT; Alain			
	AF	2010/0250252 A1	09-2010	Yasoshima; Mizuho			
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						
	AM						
	AN						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES NO		
	AO	JP 2001-188740	07/10/2001	Japan (with English Abstract)			X
	AP	JP 6-217019	08/05/1994	Japan (with English Abstract)			X
	AQ	2001-313915 A	11-09-2001	Japan (with English Abstract)			X
	AR						
	AS						
	AT						
	AU						
	AV						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	AW	Yasuhisa NIIMI, "Speech Recognition", Japan, Kyoritsu Publishing, Co., 1979, 9 pages (English Translation of the Relevant Part only)					
	AX	Office Action issued July 7, 2015 in Japanese Patent Application No. 2013-141296					
	AY	European Search Report mailed September 25, 2015 in Patent Application No. 12751848.8					
	AZ	Office Action issued on Feb. 26, 2019 in Japanese Patent Application No. 2018-022985				☐ Additional References sheet(s) attached	
Examiner	/MARIA EL-ZOOBI/				Date considered	03/15/2021	
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /M.E/



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/903,713	06/17/2020	Yoshinaga KATO	530808US	1733
22850	7590	04/19/2021		
OBLON, MCCLELLAND, MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER EL-ZOOBI, MARIA	
			ART UNIT 2652	PAPER NUMBER
			NOTIFICATION DATE 04/19/2021	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OBLONPAT@OBLON.COM
iahmadi@oblon.com
patentdocket@oblon.com

Office Action Summary	Application No. 16/903,713	Applicant(s) KATO et al.	
	Examiner MARIA EL-ZOABI	Art Unit 2652	AIA (FITF) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 6/17/2020.
 ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on ____.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.

4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5) ☒ Claim(s) 1 is/are pending in the application.
 5a) Of the above claim(s) ____ is/are withdrawn from consideration.

6) ☐ Claim(s) ____ is/are allowed.

7) ☒ Claim(s) 1 is/are rejected.

8) ☐ Claim(s) ____ is/are objected to.

9) ☐ Claim(s) ____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10) ☐ The specification is objected to by the Examiner.

11) ☒ The drawing(s) filed on 6/17/2020 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
Certified copies:
 a) ☐ All b) ☐ Some** c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)
 Paper No(s)/Mail Date ____.

3) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date ____.

4) ☐ Other: ____.

Notice of Pre-AIA or AIA Status

The present application is being examined under the pre-AIA first to invent provisions.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on nonstatutory double patenting provided the reference application or patent either is shown to be commonly owned with the examined application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. See MPEP § 717.02 for applications subject to examination under the first inventor to file provisions of the AIA as explained in MPEP § 2159. See MPEP § 2146 *et seq.* for applications not subject to examination under the first inventor to

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file provisions of the AIA. A terminal disclaimer must be signed in compliance with 37 CFR

1.321(b).

The USPTO Internet website contains terminal disclaimer forms which may be used.

Please visit www.uspto.gov/patent/patents-forms. The filing date of the application in which

the form is filed determines what form (e.g., PTO/SB/25, PTO/SB/26, PTO/AIA/25, or

PTO/AIA/26) should be used. A web-based eTerminal Disclaimer may be filled out completely

online using web-screens. An eTerminal Disclaimer that meets all requirements is auto-

processed and approved immediately upon submission. For more information about eTerminal

Disclaimers, refer to www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp.

Claim 1 is rejected on the ground of nonstatutory double patenting as being

unpatentable over claims 1-7 of U.S. Patent No. 9,307,197. Although the claims at issue are not

identical, they are not patentably distinct from each other because for example both claims 1 in

the instant application and the patent discloses { A transmission management apparatus for

managing transmission states of a plurality of transmission terminals including a first

transmission terminal and a second transmission terminal, the transmission management

apparatus comprising: a terminal management table storage unit configured to store therein a

terminal management table in which terminal information including an identifier and an

identification name of each of the transmission terminals is managed “reads on memory store

information identifying the transmission terminal”; a receiving unit configured to receive a

terminal information request signal from the first transmission terminal, the terminal

information request signal indicating a request for information for identifying the second

transmission terminal, the first transmission terminal and the second transmission terminal

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being in transmission therebetween; state information of the terminal and a transmitting unit configured to transmit the information acquired by the terminal state acquisition unit to the first transmission terminal}).

The instant application different from the patent that the instant application specifying first and second terminal, and include a terminal state acquisition unit but “does not teach “store a transmission state of each transmission terminal of the plurality of transmission terminals in association with information identifying the transmission terminal”, or “identifying the second transmission terminal that is currently in a communication transmission state with the one transmission terminal”.

Therefore, it would have been obvious to one with ordinary skill in the art to modify the instant application and rewording the claim language to obtain the patent.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of pre-AIA 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claim1 is rejected under pre-AIA 35 U.S.C. 102 (a)(1) as being unpatentable by Volmat (US 20120185685).

Regarding claim 1, Volmat discloses, a transmission management apparatus (Fig. 4, el 50) for managing transmission states of a plurality of transmission terminals including a

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first transmission terminal and a second transmission terminal (Fig. 1), the transmission management apparatus comprising:

a terminal management table storage unit (Fig. 4, el. 5003 and Fig. 5B) configured to store therein a terminal management table in which terminal information including an identifier and an identification name of each of the transmission terminals is managed (Paragraph 69-70);

a receiving unit configured to receive a terminal information request signal from the first transmission terminal (Fig. 4, el. 51), the terminal information request signal indicating a request for information for identifying the second transmission terminal, the first transmission terminal and the second transmission terminal being in transmission therebetween (Paragraph 69-75);

a terminal state acquisition unit (Fig. 4, el. 55) configured to acquire the information for identifying the second transmission terminal from the terminal management table in response to the terminal information request signal (Paragraph 70-76, 78); and

a transmitting unit configured to transmit the information acquired by the terminal state acquisition unit to the first transmission terminal (Fig. 4, el. 51).

Claim Rejections - 35 USC § 103

The following is a quotation of pre-AIA 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject

matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Ford (US 2007/0100944) in view of Tanka (US 20100226546).

Regarding claim 1, Ford discloses, a transmission management apparatus for managing transmission states of a plurality of transmission terminals including a first transmission terminal and a second transmission terminal (Fig. 1, el. 100, paragraph 22, 26), the transmission management apparatus comprising:

a receiver configured to receive a terminal information request from one transmission terminal that is currently in a communication transmission state with at least one of other transmission terminals from among the plurality of transmission terminals (Paragraph 37-38 and fig. 3, in an example, a user B (request source terminal) may send a request to a connection server to add another user C (certain transmission terminal) as a contact (destination candidate), the terminal information request indicating a request for information for identifying the at least one of the other transmission terminals (paragraph 26, 37-38; user A B or C may start an IM conversation by sending a request for conversation with another user, and messages between users are forwarded through the system. Also see 0046, a sending user (claimed source terminal) may send an invitation for a messaging session to a receiving user (claimed destination target terminal),

a terminal management table storage unit configured to store therein a terminal management table in which terminal information including an identifier and an identification

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name of each of the transmission terminals is managed (Paragraph 24 and fig. 1a, the contact store is a storage for the contacts of different users; contacts identify recipients that a user may select to send a message to, and are indexed (claimed associated) to each user (obviously using the user's identification) in order to provide a specific contact listing for each user (also see 35). MSN messenger is disclosed as a well-known example);

a transmitting unit configured to transmit the information acquired by the terminal state acquisition unit to the first transmission terminal (Paragraph 37-38,40).

Ford does not teach a terminal state acquisition unit configured to acquire the information for identifying the second transmission terminal from the terminal management table in response to the terminal information request signal.

Tanka discloses store a transmission state of each transmission terminal of the plurality of transmission terminals in association with information identifying the transmission terminal (Fig. 5).

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Ford with Tanka in order to improve the system and to facilitate sending the message to an active user which would help ensure that the target user is online and thus available to handle the received request.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARIA EL-ZOUBI whose telephone number is (571)270-3434. The examiner can normally be reached on Monday-Friday 7-4.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Ahmad Matar** can be reached on **5712727488**. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <https://ppair-my.uspto.gov/pair/PrivatePair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MARIA EL-ZOOBI/
Primary Examiner, Art Unit 2652

Search Notes 	Application/Control No. 16/903,713	Applicant(s)/Patent Under Reexamination KATO et al.
	Examiner MARIA EL-ZOOBI	Art Unit 2652

CPC - Searched*		
Symbol	Date	Examiner

CPC Combination Sets - Searched*		
Symbol	Date	Examiner
H04L65/1509, H04M3/563, H04M3/567, H04N7/15, H04N7/152	04/15/2021	M.EL

US Classification - Searched*			
Class	Subclass	Date	Examiner
348	14.02, 14.08, 14.09	04/15/2021	M.EL

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
inventor and assignee search	03/16/2021	M.EL
us and CPC search	03/16/2021	M.EL
text search	03/16/2021	M.EL
ip.com and google patent search	03/16/2021	M.EL

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

/MARIA EL-ZOOBI/ Primary Examiner, Art Unit 2652	3/16/2021
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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	0	H04NN7/15.cpc.	US-PGPUB; USPAT	OR	OFF	2021/03/16 09:11
L2	7,641	H04N7/15.cpc.	US-PGPUB; USPAT	OR	OFF	2021/03/16 09:12
L3	7,641	2 AND ((H04N7/15 OR H04N7/147 OR H04N7/152 OR H04N7/142 OR H04N21/4788 OR H04N21/2743 OR H04N2007/145 OR H04M3/567 OR H04M3/56 OR H04M7/0027 OR H04M11/00).CPC.)	US-PGPUB; USPAT	OR	OFF	2021/03/16 09:13
L4	114	display\$3 with (name id identification) with participating with conferenc\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/03/16 09:14
L5	13	3 and L4	US-PGPUB; USPAT	OR	OFF	2021/03/16 09:14
L6	117	(user\$1 confree\$1 participant\$1) near3 status with display\$3 with (line active busy) and (video near1 conferenc\$3)	US-PGPUB; USPAT	OR	OFF	2021/03/16 09:14
L7	6	3 and L6	US-PGPUB; USPAT	OR	OFF	2021/03/16 09:14
S1	5	15/041570 "9,621848".pn. 13/989665 "9,307197".pn.	US-PGPUB; USPAT	OR	OFF	2017/12/11 08:49
S2	5	15/041570 13/989665	US-PGPUB; USPAT	OR	OFF	2017/12/11 09:49
S3	2	"20120185685"	US-PGPUB; USPAT	OR	OFF	2017/12/11 09:54
S4	3	"20070100944" "20100226546"	US-PGPUB; USPAT	OR	OFF	2017/12/11 09:55
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S6	0	15/275026 and operational with state and metadata	US-PGPUB; USPAT	OR	OFF	2017/12/11 11:15
S7	0	15/275026 and operation\$2 and state and metadata	US-PGPUB; USPAT	OR	OFF	2017/12/11 11:15

S8	0	15/275026	US-PGPUB; USPAT	OR	OFF	2017/12/11 11:19
S9	0	"201520150036052"	US-PGPUB; USPAT	OR	OFF	2017/12/11 11:23
S10	5	"20150036052"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/12/11 11:24
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S13	298	(alter\$3 modif\$4 chang\$3) with (rate resolution) with (transmit\$4) with receiv\$3 and compatibility and (bandwidth)	US-PGPUB; USPAT	OR	OFF	2017/12/11 11:31
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		H04N19/436 OR H04N19/513 OR H04N19/52 OR H04N19/523 OR H04N19/56 OR H04N19/587 OR H04N19/593 OR H04N19/91 OR H04N19/94 OR H04N21/2343 OR H04N21/234309 OR H04N21/234327 OR H04N21/234363 OR H04N21/23439 OR H04N21/2541 OR H04N21/2543 OR H04N21/25841 OR H04N21/26216 OR H04N21/26225 OR H04N21/2665 OR H04N21/2668 OR H04N21/41 OR H04N21/4122 OR H04N21/4223 OR H04N21/42623 OR H04N21/43 OR H04N21/4307 OR H04N21/434 OR H04N21/4344 OR H04N21/43615 OR H04N21/43635 OR H04N21/437 OR H04N21/439 OR H04N21/4394 OR H04N21/44 OR H04N21/44016 OR H04N21/440218 OR H04N21/440227 OR H04N21/440281 OR H04N21/4408 OR H04N21/44209 OR H04N21/44231 OR H04N21/44245 OR H04N21/4436 OR H04N21/458 OR H04N21/4627 OR H04N21/472 OR H04N21/615 OR H04N21/6379 OR H04N21/64792 OR H04N21/6583 OR H04N21/812 OR H04N21/8126 OR H04N21/84 OR H04N21/8543 OR H04N5/272 OR H04N7/162).CPC.)				
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S16	1	15/442787 and (operation with attending)	US-PGPUB; USPAT	OR	OFF	2017/12/11 14:17
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S18	1	15/442787 and (chang\$3 with name)	US-PGPUB; USPAT	OR	OFF	2017/12/12 06:30
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S21	48	(video near1 conferenc\$3) and (display\$3 with (image video picture)) with switch\$3 with mode with (document information)	US-PGPUB; USPAT	OR	OFF	2017/12/12 09:36

S22	48	(video near1 conferenc\$3) and (display\$3 with (image video picture)) with switch\$3 with mode with (document information slides)	US-PGPUB; USPAT	OR	OFF	2017/12/12 09:40
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S25	100	display\$3 with (name id identification) with participating with conferenc\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/21 09:28
S26	10	"20120185685" "20040001501"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/31 10:07
S27	9	(US-20130063542-\$ or US-20050212908-\$ or US-20120300014-\$ or US-20120182384-\$ or US-20100271457-\$).did. or (US-5973724-\$ or US-8553865-\$ or US-8718626-\$ or US-6353456-\$).did.	US-PGPUB; USPAT	OR	OFF	2018/09/07 11:33
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S29	104	(user\$1 confree\$1 participant\$1) near3 status with display\$3 with (line active busy) and (video near1 conferenc\$3)	US-PGPUB; USPAT	OR	OFF	2018/09/07 11:39
S32	0	15/442787 and (piece near2 information)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/09/07 12:20
S33	0	15/442787 and (piece with information)	US-PGPUB; USPAT;	OR	OFF	2018/09/07 12:20

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
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S35	1	"20130063542"	US-PGPUB; USPAT	OR	OFF	2018/12/10 10:56
S36	1	15/442787	US-PGPUB; USPAT	OR	OFF	2018/12/10 10:59
S37	9	(US-20130063542-\$ or US-20050212908-\$ or US-20120300014-\$ or US-20120182384-\$ or US-20100271457-\$).did. or (US-5973724-\$ or US-8553865-\$ or US-8718626-\$ or US-6353456-\$).did.	US-PGPUB; USPAT	OR	OFF	2018/12/10 11:03
S38	1	15/442787	US-PGPUB; USPAT	OR	OFF	2019/01/09 08:34
S39	2	"9,307197".pn. "9,621848".pn.	US-PGPUB; USPAT	OR	OFF	2019/01/09 08:56
S40	9	(US-20130063542-\$ or US-20050212908-\$ or US-20120300014-\$ or US-20120182384-\$ or US-20100271457-\$).did. or (US-5973724-\$ or US-8553865-\$ or US-8718626-\$ or US-6353456-\$).did.	US-PGPUB; USPAT	OR	OFF	2019/01/09 09:07
S41	1,167	display\$3 with (name) with image with (user\$1 participant\$1) and conferenc\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/01/09 11:27
S42	437	display\$3 with (name) with image with (user\$1 participant\$1) and (video near1 conferenc\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/01/09 11:27
S43	0	display\$3 with (name) with image with (user\$1 participant\$1) with	US-PGPUB; USPAT;	OR	OFF	2019/01/09 11:28

		(switch\$3)and (video near1 conferenc\$3)	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S44	433	display\$3 with (name) with image with (user\$1 participant\$1) and (video near1 conferenc\$3)	US-PGPUB; USPAT	OR	OFF	2019/01/09 11:28
S45	36	display\$3 with (name) with image with (user\$1 participant\$1) with list and (video near1 conferenc\$3)	US-PGPUB; USPAT	OR	OFF	2019/01/09 11:28
S46	1	"20120182384"	US-PGPUB; USPAT	OR	OFF	2019/05/13 09:37
S47	303	request\$3 with list with (confree\$1 terminal\$1 participant\$1) with conferenc\$3	US-PGPUB; USPAT	OR	OFF	2019/05/13 10:50
S48	75	request\$3 with list with (confree\$1 terminal\$1 participant\$1) with conferenc\$3 with display\$3	US-PGPUB; USPAT	OR	OFF	2019/05/13 10:51
S49	9	(US-20130063542-\$ or US-20050212908-\$ or US-20120300014-\$ or US-20120182384-\$ or US-20100271457-\$).did. or (US-5973724-\$ or US-8553865-\$ or US-8718626-\$ or US-6353456-\$).did.	US-PGPUB; USPAT	OR	OFF	2019/08/20 09:08
S50	1	15/442787 and (request\$3 near1 information)	US-PGPUB; USPAT	OR	OFF	2019/08/20 09:35
S51	1	"9,507513".pn.	US-PGPUB; USPAT	OR	OFF	2019/08/20 09:48
S52	9,318,855	15/442787 and (request\$3 near1 information) withy after	US-PGPUB; USPAT	OR	OFF	2019/08/20 10:44
S53	0	15/442787 and (request\$3 near1 information) with after	US-PGPUB; USPAT	OR	OFF	2019/08/20 10:44
S54	0	15/442787 and (request\$3 near1 information) same after	US-PGPUB; USPAT	OR	OFF	2019/08/20 10:45
S55	1	15/442787 and (request\$3 near1 information) with conferenc\$3	US-PGPUB; USPAT	OR	OFF	2019/08/20 10:46
S56	3	"20120182384" "20120300014"	US-PGPUB; USPAT	OR	OFF	2020/01/09 09:25
S57	1	15/442787	US-PGPUB; USPAT	OR	OFF	2020/01/09 09:53
S58	9	(US-20130063542-\$ or US-20050212908-\$ or US-20120300014-\$ or US-20120182384-\$ or US-20100271457-\$).did. or (US-	US-PGPUB; USPAT	OR	OFF	2020/01/15 14:00

		5973724-\$ or US-8553865-\$ or US-8718626-\$ or US-6353456-\$).did.				
S59	1	"20120182384"	US-PGPUB; USPAT	OR	OFF	2020/03/18 08:24
S60	1	"20120182384"	US-PGPUB; USPAT	OR	OFF	2020/03/18 08:29
S61	6,275	(H04N1/00299 H04N1/42 H04N7/14 H04N7/141 H04N7/142 H04N2007/145).cpc.	US-PGPUB; USPAT	OR	OFF	2020/03/18 13:06
S62	109	display\$3 with (name id identification) with participating with conferenc\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/03/18 13:06
S63	4	S61 and S62	US-PGPUB; USPAT	OR	OFF	2020/03/18 13:06

3/16/2021 9:15:53 AM

C:\Users\melzoobi\Documents\EAST\Workspaces\15442787.wsp

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	11,054	348/14.01-14.08.cds.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/03/16 06:58
L2	11,621	(H04L65/1509 H04M3/563 H04M3/567 H04N7/15 H04N7/152).cpc.	US-PGPUB; USPAT	OR	OFF	2021/03/16 07:00
L3	11,316	2 AND ((H04N7/15 OR H04N7/147 OR H04N7/152 OR H04N7/142 OR H04N7/157 OR H04N2007/145 OR H04L65/403 OR H04L12/1822 OR H04L12/1818 OR H04M3/567).CPC.)	US-PGPUB; USPAT	OR	OFF	2021/03/16 07:04
S1	1	16/903713	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/03/15 08:29
S2	22,202	((("RICOH") near3 ("COMPANY") near3 ("LTD"))).AS,AANM.	USPAT	OR	OFF	2021/03/15 08:29
S3	143	((("KATO") near3 ("Yoshinaga"))).INV.	US-PGPUB	OR	OFF	2021/03/15 08:29
S4	33	((("OKUYAMA") near3 ("Taro"))).INV.	US-PGPUB	OR	OFF	2021/03/15 08:29
S5	7	15/442787 13/989665 15/041570	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/03/15 08:34
S6	22,372	S2 S3 S4 S5	US-PGPUB; USPAT	OR	OFF	2021/03/15 08:35
S7	679	S6 and (management near1 table)".clm" and (terminal near1 state).clm. and identifier.clm.	US-PGPUB; USPAT	OR	OFF	2021/03/15 08:36
S8	679	S6 and (management near1 table)".clm" and (terminal near1 state).clm. and identifier.clm. and request.clm. and name.dm.	US-PGPUB; USPAT	OR	OFF	2021/03/15 08:37
S9	679	S6 and (management near1 table)".clm" and (terminal adj	US-PGPUB; USPAT	OR	OFF	2021/03/15 08:38

		state).clm. and identifier.clm. and request.clm. and name.dm.				
S10	679	S6 and (management near1 table)".clm." and (terminal adj state).clm. and identifier.clm. and request.clm. and name.dm.	US-PGPUB; USPAT	OR	OFF	2021/03/15 08:38
S11	679	S7 and (management near1 table)".clm." and (terminal adj state).clm. and identifier.clm. and request.clm. and name.dm.	US-PGPUB; USPAT	OR	OFF	2021/03/15 08:39
S12	7	S5 and (management near1 table)".clm." and (terminal adj state).clm. and identifier.clm. and request.clm. and name.dm.	US-PGPUB; USPAT	OR	OFF	2021/03/15 08:39
S13	3	S5 and ((management near1 table)and (terminal adj state) and identifier and request and name).clm.	US-PGPUB; USPAT	OR	OFF	2021/03/15 08:39
S14	2	"20120185685"	US-PGPUB; USPAT	OR	OFF	2021/03/15 08:51
S15	1	"9,307197".pn.	US-PGPUB; USPAT	OR	OFF	2021/03/15 08:53
S16	2	"20120185685"	US-PGPUB; USPAT	OR	OFF	2021/03/15 10:51

3/16/2021 7:47:22 AM

C:\Users\melzoobi\Documents\EAST\Workspaces\16903713.wsp

DOCKET NO: 530808US

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
YOSHINAGA KATO, ET AL. : EXAMINER: EL-ZOOBI, MARIA
SERIAL NO: 16/903,713 :
FILED: JUNE 17, 2020 : GROUP ART UNIT: 2652
FOR: TRANSMISSION :
MANAGEMENT APPARATUS

AMENDMENT UNDER 37 C.F.R. § 1.111

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

Commissioner:

In response to the Office Action dated April 19, 2021, please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 10 of this paper.

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A ~~transmission system, comprising:~~
a management apparatus for managing transmission states of, and
~~a plurality of transmission terminals including a first transmission terminal and a~~
~~second transmission terminal, the transmission management apparatus comprising:~~
wherein the management apparatus is configured to
~~a terminal management table storage unit configured to store therein a terminal~~
~~management table in which terminal information including an identifier and an identification~~
~~name of each of the transmission terminals is managed;~~
store state information associated with identification information transmitted
from a transmission terminal,
~~a receiving unit configured to receive a terminal information request signal from the~~
~~first transmission terminal, the terminal information request signal indicating a request for~~
~~information for identifying the second transmission terminal, the first transmission terminal~~
~~and the second transmission terminal being in transmission therebetween;~~
~~a terminal state acquisition unit configured to acquire the information for identifying~~
~~the second transmission terminal from the terminal management table in response to the~~
~~terminal information request signal; and~~
update, when the transmission terminal associated with the identification
information attends a video conference, the state information to a state of attending the video
conference, and
transmit, to the transmission terminal that is in the state of attending the video
conference, name information associated with a transmission terminal that is also attending the
video conference.

~~a transmitting unit configured to transmit the information acquired by the terminal state acquisition unit to the first transmission terminal and~~

at least one of the transmission terminals includes

a first display function that displays, in a state of attending a specific video conference, captured image data transmitted from another transmission terminal in a first display area, and

a second display function that displays, in a state of attending the specific video conference, a list of the name information received from the management apparatus in a second display area different from the first display area, the second display function displaying, in a state of the first display function displaying the captured image data on a display screen and not displaying the list on the display screen, the list on the display screen, in response to a predetermined input operation.

2. (New) The system according to claim 1, wherein the name information associated with a particular transmission terminal of the plurality of transmission terminals is information to be registered or changed in response to a request from the particular transmission terminal.

3. (New) The system according to claim 1, wherein a first transmission terminal receives selection of a piece of name information from the list, which is displayed on the display screen of the first transmission terminal, and controls display of an image transmitted from a particular transmission terminal, of the plurality of transmission terminals, associated with the selected piece of name information.

4. (New) The system according to claim 1, wherein a first transmission terminal receives selection of a piece of name information from the list displayed on the display screen

of the first transmission terminal, and displays on the display screen an image transmitted from a particular transmission terminal, of the plurality of transmission terminals, associated with the selected piece of name information.

5. (New) The system according to claim 4, wherein the first transmission terminal receives selection of the piece of name information from the list displayed on the display screen and selectively displays on the display screen an image transmitted from the particular transmission terminal associated with the selected piece of name information from among images transmitted from other transmission terminals, of the plurality of transmission terminals, attending the same conference.

6. (New) The system according to claim 1, wherein
other transmission terminals, of the plurality of transmission terminals, other than a first transmission terminal each include an image data input circuit configured to receive image data representing an image taken by an imaging device, and

the second display function displays, on the display screen of the first transmission terminal, not only the received name information, but also an image represented by image data that is received and transmitted by the image data input circuit of a priority transmission terminal from among the other transmission terminals, which are attending the same conference.

7. (New) The system according to claim 6, wherein
the other transmission terminals each include a sound data input circuit configured to receive sound data obtained by a sound collector, and

the second display function identifies, as the priority transmission terminal, a transmission terminal from which the sound data representing voices received by the sound data input unit is transmitted, from among the other transmission terminals that are attending the same conference.

8. (New) The system according to claim 1, wherein

the other transmission terminals, which are other than a first transmission terminal and are attending the same conference, transmit or receive at least one of image data and sound data to or from each other via a relaying apparatus.

9. (New) The system according to claim 1, wherein each transmission terminal is one

of a video conference terminal, a car navigation device, and a cell phone.

10. (New) The system according to claim 1, wherein the name information indicates

an identification name of a corresponding transmission terminal.

11. (New) The system according to claim 1, wherein the display screen is a screen to

be displayed on a display connected to the transmission terminal.

12. (New) A method, comprising:

storing state information associated with identification information transmitted from a transmission terminal of a plurality of transmission terminals;

updating, when the transmission terminal associated with the identification information attends a video conference, the state information to a state of attending the video conference;

transmitting, to the transmission terminal that is in the state of attending the video conference, name information associated with a transmission terminal that is also attending the video conference;

displaying, as a first display function of the first transmission terminal, in a state of attending a specific video conference, captured image data transmitted from another transmission terminal in a first display area; and

displaying, as a second display function of the first transmission terminal, in a state of attending the specific video conference, a list of the name information, received from a management apparatus, in a second display area different from the first display area, the second display function displaying, in a state of the first display function displaying the captured image data on a display screen and not displaying the list on the display screen, the list on the display screen, in response to a predetermined input operation.

13. (New) The method according to claim 12, wherein the name information associated with the transmission terminal is information to be registered or changed in response to a request from the transmission terminal.

14. (New) The method according to claim 12, wherein the transmission terminal receives selection of a piece of name information from the list displayed on the display screen and controls display of an image transmitted from a particular transmission terminal, of the plurality of transmission terminals, associated with the selected piece of name information.

15. (New) The method according to claim 12, wherein the transmission terminal receives selection of a piece of name information from the list displayed on the display screen, and displays on the display screen an image transmitted from a particular transmission

terminal, of the plurality of transmission terminals, associated with the selected piece of name information.

16. (New) The method according to claim 15, wherein the first transmission terminal receives selection of the piece of name information from the list displayed on the display screen and selectively displays on the display screen an image transmitted from the particular transmission terminal associated with the selected piece of name information from among images transmitted from other transmission terminals, of the plurality of transmission terminals, attending the same conference.

17. (New) The method according to claim 12, wherein the other transmission terminals, which are other than first transmission terminal and are attending the same conference, transmit or receive at least one of image data and sound data to or from each other via a relaying apparatus.

18. (New) The method according to claim 12, wherein each transmission terminal of the plurality of transmission terminals is one of a video conference terminal, a car navigation device, and a cell phone.

19. (New) The method according to claim 12, wherein the name information indicates an identification name of a corresponding transmission terminal.

20. (New) The method according to claim 12, wherein the display screen is a screen to be displayed on a display connected to the transmission terminal.

21. (New) A transmission terminal, comprising:

circuitry configured to

receive, from a management apparatus that stores state information of each of a plurality of transmission terminals including the transmission terminal, name information associated with a transmission terminal, of the plurality of transmission terminals, that is also attending a specific video conference, when the transmission terminal is attending the specific video conference,

display, as a first display function, in a state of attending the specific video conference, captured image data transmitted from another transmission terminal in a first display area, and

display, as a second display function, in a state of attending the specific video conference, a list of the name information received from the management apparatus in a second display area different from the first display area, the second display function displaying, in a state of the first display function displaying the captured image data on a display screen and not displaying the list on the display screen, the list on the display screen, in response to a predetermined input operation.

22. (New) A method, comprising:

receiving, from a management apparatus that stores state information of each of a plurality of transmission terminals including the transmission terminal, name information associated with a transmission terminal, of the plurality of transmission terminals, that is also attending a specific the video conference, when the transmission terminal is attending the specific video conference,

displaying, as a first display function, in a state of attending the specific video conference, captured image data transmitted from another transmission terminal in a first display area, and

displaying, as a second display function, in a state of attending the specific video conference, a list of the name information received from the management apparatus in a second display area different from the first display area, the second display function displaying, in a state of the first display function displaying the captured image data on a display screen and not displaying the list on the display screen, the list on the display screen, in response to a predetermined input operation.

23. (New) The system of claim 1, wherein the first display area is allocated for the other transmission terminal on the display screen.

Electronic Acknowledgement Receipt	
EFS ID:	43285120
Application Number:	16903713
International Application Number:	
Confirmation Number:	1733
Title of Invention:	TRANSMISSION MANAGEMENT APPARATUS
First Named Inventor/Applicant Name:	Yoshinaga KATO
Customer Number:	22850
Filer:	Philippe Jean-Claude Signore/Teresa Cole
Filer Authorized By:	Philippe Jean-Claude Signore
Attorney Docket Number:	530808US
Receipt Date:	19-JUL-2021
Filing Date:	17-JUN-2020
Time Stamp:	14:52:14
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$ 780
RAM confirmation Number	E20217IE52342988
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		530808US_Amd.pdf	1451277	yes	14
			acda91fd72c9197aa8c56819e3882e3e9e6fd137		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Miscellaneous Incoming Letter		1	1	
	Amendment/Req. Reconsideration-After Non-Final Reject		2	2	
	Claims		3	10	
	Applicant Arguments/Remarks Made in an Amendment		11	14	
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	31951	no	2
			1e011f0b3368c2cbfa7ef3cc2c984a6ad054275b		
Warnings:					
Information:					
Total Files Size (in bytes):			1483228		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-23 are currently pending. Claim 1 is amended; and Claims 2-23 are added by the present amendment. The changes to the claims are supported by the originally filed specification and do not add new matter.

In the outstanding Office Action, Claim 1 was rejected on the ground of nonstatutory double patenting as being unpatentable over claims in U.S. Patent No. 9,307,197; Claim 1 was rejected under 35 U.S.C. § 102(a)(1) as being unpatentable over U.S. Patent Application Publication No. 2012/0185685 to Volmat (hereinafter “the ‘658 application”); and Claim 1 was rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent Application Publication No. 2007/0100944 to Ford (hereinafter “the ‘944 application”) in view of U.S. Patent Application Publication No. 2010/0226546 to Tanaka (hereinafter “the ‘546 application”).

Amended Claim 1 is directed to a system, comprising:

a management apparatus; and

a plurality of transmission terminals,

wherein the management apparatus is configured to

store state information associated with
identification information transmitted from a transmission
terminal,

update, when the transmission terminal associated
with the identification information attends a video conference,
the state information to a state of attending the video conference,
and

transmit, to the transmission terminal that is in the
state of attending the video conference, name information
associated with a transmission terminal that is also attending the
video conference, and

at least one of the transmission terminals includes

a first display function that displays, in a state of attending a specific video conference, captured image data transmitted from another transmission terminal in a first display area, and

a second display function that displays, in a state of attending the specific video conference, a list of the name information received from the management apparatus in a second display area different from the first display area, the second display function displaying, in a state of the first display function displaying the captured image data on a display screen and not displaying the list on the display screen, the list on the display screen, in response to a predetermined input operation.

The changes to Claim 1 are supported by the originally filed specification and do not add new matter.¹

Applicants respectfully submit that the double patenting rejection of the claims is rendered moot by the present amendment to Claim 1. In particular, Applicants respectfully submit that the ‘197 claims do not recite the features added to Claim 1 by the present amendment.

The ‘685 application is directed to a method comprising accepting turning on a power; obtaining a first decode key when turning on the power is accepted and decoding the encoded execution starting data by a first decode key to start executing a program for a data processing apparatus; sending a request for authentication to an external apparatus after starting execution of the program for the data processing apparatus; and starting to provide the function when obtaining an authentication result indicating the apparatus is authenticated from the external apparatus.

Further, as shown in Figure 7, the ‘685 application discloses a destination list in a video conferencing system.

However, Applicants respectfully submit that the ‘685 application fails to disclose a system, comprising a management apparatus and a plurality of transmission terminals, wherein

¹ See, e.g., Figures 14 and 15 and the discussion related thereto in the specification. See in particular paragraphs 147-162 in the published application.

at least one of the transmission terminals includes a first display function that displays, in a state of attending a specific video conference, captured image data transmitted from another transmission terminal in a first display area, and a second display function that displays, in a state of attending the specific video conference, a list of the name information received from the management apparatus in a second display area different from the first display area, the second display function displaying, in a state of the first display function displaying the captured image data on a display screen and not displaying the list on the display screen, the list on the display screen, in response to a predetermined input operation, as recited in amended Claim 1.

Accordingly, Applicants respectfully submit that the rejection of Claim 1 is rendered moot by the present amendment to that claim.

Further, regarding the rejection under 35 U.S.C. § 103, Applicants respectfully submit that no matter how the teachings of the '944 and '546 applications are combined, the combination does not teach or suggest a system comprising a management apparatus and a plurality of transmission terminals, wherein at least one of the transmission terminals includes a first display function that displays, in a state of attending a specific video conference, captured image data transmitted from another transmission terminal in a first display area, and a second display function that displays, in a state of attending the specific video conference, a list of the name information received from the management apparatus in a second display area different from the first display area, the second display function displaying, in a state of the first display function displaying the captured image data on a display screen and not displaying the list on the display screen, the list on the display screen, in response to a predetermined input operation, as recited in amended Claim 1.

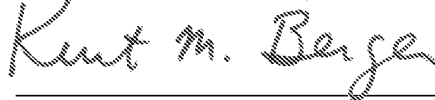
Accordingly, Applicants respectfully submit that the rejection of Claim 1 is rendered moot by the present amendment to Claim 1.

The present amendment also sets forth new Claims 2-23 for examination on the merits, including independent Claims 12, 21, and 22. For the reasons stated above, Applicants respectfully submit that new Claims 12, 21, and 22 patentably define over any proper combination of the cited references.

Thus, it is respectfully submitted that independent Claims 1, 12, 21, and 22 (and all associated dependent claims) are in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully Submitted,

OBLON, McCLELLAND,
MAIER & NEUSTADT, L.L.P.



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(OMMN 08/09)
27150405_1

Docket No. 530808US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INVENTOR(S) Yoshinaga KATO, et al.

SERIAL NO: 16/903,713

ART UNIT: 2652

FILING DATE: June 17, 2020

EXAMINER: EL-ZOOBI, MARIA

FOR: TRANSMISSION MANAGEMENT APPARATUS

FEE TRANSMITTAL

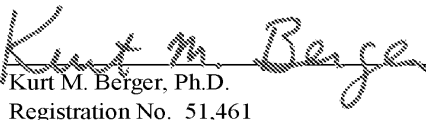
- ☐ No additional fee is required
- ☐ Small entity status of this application under 37 C.F.R. §1.9 and §1.27 is claimed.
- ☐ Track 1 Prioritized Examination

The Fee has been calculated as shown below:

FOR	NUMBER FILED	NUMBER EXTRA	RATE	CALCULATIONS
TOTAL CLAIMS	23 - 20 =	3	x \$100 =	\$300.00
INDEPENDENT CLAIMS	4 - 3 =	1	x \$480 =	\$480.00
☐ MULTIPLE DEPENDENT CLAIMS (If applicable)			+ \$860 =	\$0.00
☐ LATE FILING OF DECLARATION			+ \$160 =	\$0.00
☐ NON-ELECTRONIC FILING FEE			+ \$400 =	\$0.00
BASIC FEES				\$0.00
TOTAL OF ABOVE CALCULATIONS				\$780.00
☐ REDUCTION BY 50% FOR FILING BY SMALL ENTITY				\$0.00
☐ FILING IN NON-ENGLISH LANGUAGE			+ \$140 =	\$0.00
TOTAL				\$780.00

- ☐ Please charge Deposit Account No. **15-0030** in the amount of _____
- ☒ Credit card payment is being made online (if electronically filed), or is attached hereto (if paper filed), in the amount of **\$780.00**.
- ☒ The Director is hereby authorized to charge any additional fees which may be required for the papers being filed herewith and for which no payment is enclosed herewith, or credit any overpayment to Deposit Account No. **15-0030**, with the **EXCEPTION** of deficiencies in fees for multiple dependent claims in new applications.
- ☒ If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time may be charged to Deposit Account No. 15-0030.

Submitted by:


Kurt M. Berger, Ph.D.
Registration No. 51,461

Customer Number

22850

Tel. (703) 413-3000
Fax. (703) 413-2220
(OMMN 02/12)

Electronic Patent Application Fee Transmittal				
Application Number:		16903713		
Filing Date:		17-Jun-2020		
Title of Invention:		TRANSMISSION MANAGEMENT APPARATUS		
First Named Inventor/Applicant Name:		Yoshinaga KATO		
Filer:		Philippe Jean-Claude Signore/Teresa Cole		
Attorney Docket Number:		530808US		
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
CLAIMS IN EXCESS OF 20	1202	3	100	300
INDEPENDENT CLAIMS IN EXCESS OF 3	1201	1	480	480
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				780

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875				Application or Docket Number 16/903,713		Filing Date 06/17/2020		☐ To be Mailed			
ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO											
APPLICATION AS FILED - PART I											
		(Column 1)		(Column 2)							
FOR		NUMBER FILED		NUMBER EXTRA		RATE (\$)		FEE (\$)			
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))		N/A		N/A		N/A					
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))		N/A		N/A		N/A					
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))		N/A		N/A		N/A					
TOTAL CLAIMS (37 CFR 1.16(i))		minus 20 =		*		x \$100 =					
INDEPENDENT CLAIMS (37 CFR 1.16(h))		minus 3 =		*		x \$460 =					
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))		If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).									
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))											
* If the difference in column 1 is less than zero, enter "0" in column 2.						TOTAL					
APPLICATION AS AMENDED - PART II											
		(Column 1)		(Column 2)		(Column 3)					
AMENDMENT	07/19/2021	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR		PRESENT EXTRA		RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	* 23	Minus	** 20	= 3			x \$100 =		300	
	Independent (37 CFR 1.16(h))	* 4	Minus	*** 3	= 1			x \$480 =		480	
	☐ Application Size Fee (37 CFR 1.16(s))										
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
								TOTAL ADD'L FEE		780	
		(Column 1)		(Column 2)		(Column 3)					
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR		PRESENT EXTRA		RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	*	Minus	**	=			x \$0 =			
	Independent (37 CFR 1.16(h))	*	Minus	***	=			x \$0 =			
	☐ Application Size Fee (37 CFR 1.16(s))										
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
								TOTAL ADD'L FEE			
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.								LIE			
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".								/MARQUITA D JONES/			
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".											
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.											

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Acknowledgement Receipt	
EFS ID:	43361731
Application Number:	16903713
International Application Number:	
Confirmation Number:	1733
Title of Invention:	TRANSMISSION MANAGEMENT APPARATUS
First Named Inventor/Applicant Name:	Yoshinaga KATO
Customer Number:	22850
Filer:	Noah K. Flaks/Sandra Miles
Filer Authorized By:	Noah K. Flaks
Attorney Docket Number:	530808US
Receipt Date:	28-JUL-2021
Filing Date:	17-JUN-2020
Time Stamp:	11:06:30
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment		no			
File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	16903713-POA-signed.pdf	1175880	no	2
			f5d929eab37f319b514add67bf88881eb68e701b		
Warnings:					

Information:	
Total Files Size (in bytes):	1175880
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.	

TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

NOTE: This form is to be submitted with the Power of Attorney by Applicant form (PTO/AIA/82B) to identify the application to which the Power of Attorney is directed, in accordance with 37 CFR 1.5, unless the application number and filing date are identified in the Power of Attorney by Applicant form. If neither form PTO/AIA/82A nor form PTO/AIA82B identifies the application to which the Power of Attorney is directed, the Power of Attorney will not be recognized in the application.

Application Number	16/903,713
Filing Date	06-17-2020
First Named Inventor	Yoshinaga KATO
Title	TRANSMISSION MANAGEMENT APPARATUS
Art Unit	2652
Examiner Name	EL-ZOOBI, MARIA
Attorney Docket Number	16408US04CON

SIGNATURE of Applicant or Patent Practitioner

Signature	/Noah K. Flaks/	Date (Optional)	2021-07-28
Name	Noah K. Flaks	Registration Number	69541
Title (if Applicant is a juristic entity)			
Applicant Name (if Applicant is a juristic entity)		Ricoh Company, Ltd.	
NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. If more than one applicant, use multiple forms.			
☒ *Total of <u>1</u> forms are submitted.			

This collection of information is required by 37 CFR 1.131, 1.32, and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

POWER OF ATTORNEY BY APPLICANT

I hereby revoke all previous powers of attorney given in the application identified in either the attached transmittal letter or the boxes below.

Application Number	Filing Date

(Note: The boxes above may be left blank if information is provided on form PTO/AIA/82A.)

☒ I hereby appoint the Patent Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above:

154930

OR

☐ I hereby appoint Practitioner(s) named in the attached list (form PTO/AIA/82C) as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the patent application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above. (Note: Complete form PTO/AIA/82C.)

Please recognize or change the correspondence address for the application identified in the attached transmittal letter or the boxes above to:

☒ The address associated with the above-mentioned Customer Number

OR

☐ The address associated with Customer Number:

OR

☐ Firm or Individual Name

Address

City

State

Zip

Country

Telephone

Email

I am the Applicant (if the Applicant is a juristic entity, list the Applicant name in the box):

Ricoh Company, Ltd.

- ☐ Inventor or Joint Inventor (title not required below)
- ☐ Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)
- ☒ Assignee or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)
- ☐ Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document) (provide signer's title if applicant is a juristic entity)

SIGNATURE of Applicant for Patent

The undersigned (whose title is supplied below) is authorized to act on behalf of the applicant (e.g., where the applicant is a juristic entity).

Signature

/ *Shigeharu Uda* /

Date (Optional)

May 18, 2021

Name

Shigeharu Uda

Title

General Manager of Intellectual Property Development Dept, Intellectual Property Center, Professional Services Division

NOTE: Signature - This form must be signed by the applicant in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. If more than one applicant, use multiple forms.

☐ Total of forms are submitted.

This collection of information is required by 37 CFR 1.131, 1.32, and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
16/903,713	06/17/2020	Yoshinaga KATO	16408US04CON

CONFIRMATION NO. 1733

POA ACCEPTANCE LETTER

154930
XSENSUS LLP
100 Daingerfield Road
Suite 402
Alexandria, VA 22314



Date Mailed: 07/30/2021

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 07/28/2021.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at (571) 272-4000 or (571) 272-4200 or 1-888-786-0101.

/mmasfaw/



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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
16/903,713	06/17/2020	Yoshinaga KATO	530808US

CONFIRMATION NO. 1733

POWER OF ATTORNEY NOTICE

22850
OBLON, MCCLELLAND, MAIER & NEUSTADT, L.L.P.
1940 DUKE STREET
ALEXANDRIA, VA 22314



OC000000127315116

Date Mailed: 07/30/2021

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 07/28/2021.

- The Power of Attorney to you in this application has been revoked by the applicant. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at (571) 272-4000 or (571) 272-4200 or 1-888-786-0101.

/mmasfaw/

<i>Index of Claims</i> 	Application/Control No. 16/903,713	Applicant(s)/Patent Under Reexamination KATO et al.
	Examiner MARIA EL-ZOOBI	Art Unit 2652

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS										
☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47										
CLAIM		DATE								
Final	Original	04/15/2021	08/11/2021							
	1	✓	÷							
	2		÷							
	3		÷							
	4		÷							
	5		÷							
	6		÷							
	7		÷							
	8		÷							
	9		÷							
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	22		÷							
	23		÷							



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/903,713	06/17/2020	Yoshinaga KATO	16408US04CON	1733
154930	7590	08/16/2021	EXAMINER	
XSENSUS LLP			EL-ZOOBI, MARIA	
100 Daingerfield Road			ART UNIT	
Suite 402			PAPER NUMBER	
Alexandria, VA 22314			2652	
			NOTIFICATION DATE	
			DELIVERY MODE	
			08/16/2021	
			ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Faith.Baggett@xsensus.com
Sandy.Miles@Xsensus.com
anaquadocketing@Xsensus.com

Office Action Summary	Application No. 16/903,713	Applicant(s) KATO et al.	
	Examiner MARIA EL-ZOABI	Art Unit 2652	AIA (FITF) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 7/19/2021.
 ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on ____.

2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.

4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5) ☒ Claim(s) 1-23 is/are pending in the application.
 5a) Of the above claim(s) ____ is/are withdrawn from consideration.

6) ☐ Claim(s) ____ is/are allowed.

7) ☐ Claim(s) ____ is/are rejected.

8) ☐ Claim(s) ____ is/are objected to.

9) ☒ Claim(s) 1-23 are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10) ☐ The specification is objected to by the Examiner.

11) ☒ The drawing(s) filed on 6/17/2020 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
Certified copies:
 a) ☐ All b) ☐ Some** c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)
 Paper No(s)/Mail Date ____.

3) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date ____.

4) ☐ Other: ____.

Notice of Pre-AIA or AIA Status

The present application is being examined under the pre-AIA first to invent provisions.

Response to Amendment

Response to Amendment:

1. Amended claim 1 and newly submitted claims 2-23, are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the original claim is directed to {transmission management apparatus for managing transmission states of a plurality of transmission terminals including a first transmission terminal and a second transmission terminal, the transmission management apparatus comprising: a terminal management table storage unit configured to store therein a terminal management table in which terminal information including an identifier and an identification name of each of the transmission terminals is managed; a receiving unit configured to receive a terminal information request signal from the first transmission terminal, the terminal information request signal indicating a request for information for identifying the second transmission terminal, the first transmission terminal and the second transmission terminal being in transmission therebetween; a terminal state acquisition unit configured to acquire the information for identifying the second transmission terminal from the terminal management table in response to the terminal information request signal; and a transmitting unit configured to transmit the information acquired by the terminal state acquisition unit to the first transmission terminal}, classified in class 348/14.02 and amended claim 1 directed to {system, comprising: a management apparatus and a plurality of transmission terminals wherein the management apparatus is configured to store state information associated with identification

Art Unit: 2652

information transmitted from a transmission terminal, update, when the transmission terminal associated with the identification information attends a video conference, the state information to a state of attending the video conference, and transmit, to the transmission terminal that is in the state of attending the video conference, name information associated with a transmission terminal that is also attending the video conference, and at least one of the transmission terminals includes a first display function that displays, in a state of attending a specific video conference, captured image data transmitted from another transmission terminal in a first display area, and a second display function that displays, in a state of attending the specific video conference, a list of the name information received from the management apparatus in a second display area different from the first display area, the second display function displaying, in a state of the first display function displaying the captured image data on a display screen and not displaying the list on the display screen, the list on the display screen, in response to a predetermined input operation}, classified in 348/14.09 "H04N7/152".

Examiner will have to conduct different search criteria, different terms and different search strategy.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 1-23 withdrawn from consideration as being directed to a non-elected invention.

In summary, the amendment filed on 7/19/2021 presents only claims drawn to a non-elected invention is non-responsive (MPEP § 821.03).

Since the above-mentioned amendment appears to be a bona fide attempt to reply, applicant is given a TIME PERIOD of TWO (2) MONTHS from the mailing date of this notice within which to supply the omission or correction in order to avoid abandonment. EXTENSIONS OF THIS TIME PERIOD UNDER 37 CFR 1.136(a) ARE AVAILABLE.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiners should be directed to MARIA EL-ZOOBI whose telephone number is (571)270-3434. The examiner can normally be reached on Monday-Friday 7-4.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Ahmad Matar** can be reached on **5712727488**. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <https://ppair-my.uspto.gov/pair/PrivatePair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

Application/Control Number: 16/903,713

Page 5

Art Unit: 2652

free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MARIA EL-ZOOBI/

Primary Examiner, Art Unit 2652

DOCKET NO: 16408US04CON

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
YOSHINAGA KATO : EXAMINER: EL-ZOOBI, MARIA
SERIAL NO: 16/903,713 :
FILED: 17 JUN 2020 : GROUP ART UNIT: 2652
FOR: TRANSMISSION MANAGEMENT APPARATUS

AMENDMENT UNDER 37 C.F.R. § 1.111

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

Commissioner:

In response to the Office Action dated April 19, 2021, and the Notice of Non-Compliant Amendment of August 16, 2021, please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 6 of this paper.

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A transmission management apparatus for ~~managing~~
updating transmission states of a plurality of transmission terminals including a first
transmission terminal and a second transmission terminal, the transmission management
apparatus comprising:

a ~~terminal management table~~ storage medium ~~[[unit]]~~ configured to store therein a
~~terminal management table in which~~ terminal information including ~~an identifier and an~~
identification ~~name~~ names and transmission states associated with ~~of each of the respective~~
transmission terminals ~~is managed~~; wherein

the transmission management apparatus is configured to:

update the transmission state associated with the first transmission terminal to
a transmission state indicating in video communication, based on attendance request
information for video communication received from the first transmission terminal;

~~a receiving unit configured to receive a terminal~~ an information request signal
from the first transformation terminal when the first transmission terminal is in video
communication with at least the second transmission terminal, the ~~terminal~~ information
request signal indicating a request for information ~~for identifying the second transmission~~
~~terminal~~ on a transmission terminal, including the second transmission terminal, with which
the first transmission terminal is in video communication, the transmission states associated
with the first transmission terminal and the second transmission terminal being in
transmission therebetween each indicating in video communication;

~~a terminal state acquisition unit configured to acquire the information for identifying the second transmission terminal including the identification name associated with the transmission terminal with which the first transmission terminal is in video communication based on the transmission state from the terminal management table storage medium in response to the terminal information request signal; and~~

~~a transmitting unit configured to transmit the acquired information acquired by the terminal state acquisition unit to the first transmission terminal.~~

Claim 2 (New): The transmission management apparatus of claim 1, wherein the storage medium stores a terminal management table that contains the terminal information.

Claim 3 (New): The transmission management apparatus of claim 1, wherein the storage medium stores identifiers for identifying the respective transmission terminals.

Claim 4 (New): The transmission management apparatus of claim 1, wherein the identification name associated with a particular transmission terminal of the plurality of transmission terminals is information to be registered or changed in response to a request from the particular transmission terminal.

Claim 5 (New): The transmission management apparatus of claim 1, wherein other transmission terminals of the plurality of transmission terminals, which are other than the first transmission terminal and are attending a same conference, transmit or receive at least one of image data and sound data to or from each other via a relaying apparatus.

Claim 6 (New): The transmission management apparatus of claim 1, wherein each of the plurality of transmission terminals is one of a video conference terminal, a car navigation device, and a cell phone.

Claim 7 (New): The transmission management apparatus of claim 1, wherein the identification names that are stored are associated with identification information transmitted from the plurality of transmission terminals.

Claim 8 (New): The transmission management apparatus of claim 1, wherein a destination list associated with identification information transmitted from the first transmission terminal is stored, and the destination list registers at least the second transmission terminal as a destination candidate.

Claim 9 (New): A method comprising:

- updating, by a transmission management apparatus, transmission states of a plurality of transmission terminals including a first transmission terminal and a second transmission terminal;
- storing, in a storage medium, terminal information including identification names and transmission states associated with the respective transmission terminals;
- updating, by the transmission management apparatus, the transmission state associated with the first transmission terminal to a transmission state indicating in video communication, based on attendance request information for video communication received from the first transmission terminal;
- receiving, by the transmission management apparatus, an information request signal from the first transformation terminal when the first transmission terminal is in video

communication with at least the second transmission terminal, the information request signal indicating a request for information on a transmission terminal, including the second transmission terminal, with which the first transmission terminal is in video communication, the transmission states associated with the first transmission terminal and the second transmission terminal each indicating in video communication;

acquiring, by the transmission management apparatus, information including the identification name associated with the transmission terminal with which the first transmission terminal is in video communication based on the transmission state from the storage medium in response to the information request signal; and

transmitting, by the transmission management apparatus, the acquired information to the first transmission terminal.

Claim 10 (New): A system comprising:

a first transmission terminal; and

a transmission management apparatus for updating transmission states of a plurality of transmission terminals including the first transmission terminal and a second transmission terminal, the transmission management apparatus comprising:

a storage medium configured to store therein terminal information including identification names and transmission states associated with the respective transmission terminals,

wherein the transmission management apparatus is configured to:

update the transmission state associated with the first transmission terminal to a transmission state indicating in video communication, based on attendance request information for video communication received from the first transmission terminal,

receive an information request signal from the first transmission terminal when the first transmission terminal is in video communication with at least the second transmission terminal, the information request signal indicating a request for information on a transmission terminal, including the second transmission terminal, with which the first transmission terminal is in video communication, the transmission states associated with the first transmission terminal and the second transmission terminal each indicating in video communication,

acquire information including the identification name associated with the transmission terminal with which the first transmission terminal is in video communication based on the transmission state from the storage medium in response to the information request signal, and

transmit the acquired information to the first transmission terminal.

Electronic Acknowledgement Receipt	
EFS ID:	44057625
Application Number:	16903713
International Application Number:	
Confirmation Number:	1733
Title of Invention:	TRANSMISSION MANAGEMENT APPARATUS
First Named Inventor/Applicant Name:	Yoshinaga KATO
Customer Number:	154930
Filer:	Derek P. Benke/Christine Grimes
Filer Authorized By:	Derek P. Benke
Attorney Docket Number:	16408US04CON
Receipt Date:	18-OCT-2021
Filing Date:	17-JUN-2020
Time Stamp:	17:27:19
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment		no			
File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		16408US04CON_Response-to-Non-Compliant-Amendment.pdf	262926	yes	12
			ab88201c58cc7f8f53bb55d9b865a146a2ecb293		

Multipart Description/PDF files in .zip description			
Document Description	Start	End	
Transmittal Letter	1	1	
Fee Worksheet (SB06)	2	2	
Amendment/Req. Reconsideration-After Non-Final Reject	3	3	
Claims	4	8	
Applicant Arguments/Remarks Made in an Amendment	9	12	

Warnings:

Information:

Total Files Size (in bytes):	262926
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New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended, and in light of the following discussion, is respectfully requested.

Claims 1-10 are pending in this application, claim 1 having been presently amended; and claims 2-10 having been added. Support for amended claim 1 and new claims 2-10 can be found in the original claims, drawings, and specification as filed.¹ No new matter has been added.

In reply to the Notice of Non-Compliant Amendment, Applicants are hereby submitting amended claims. Applicants respectfully submit that amended claim 1 is directed to the same concept as original claim 1. Therefore, Applicant respectfully submits that claims 1-10 be entered and considered on the merits.

In the outstanding Office Action, claim 1 was rejected on the ground of nonstatutory double patenting as being unpatentable over claims in U.S. Patent No. 9,307,197; claim 1 was rejected under 35 U.S.C. § 102(a)(1) as being unpatentable over U.S. Patent Application Publication No. 2012/0185685 to Volmat; and claim 1 was rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent Application Publication No. 2007/0100944 to Ford in view of U.S. Patent Application Publication No. 2010/0226546 to Tanaka.

Applicants respectfully submit that the double patenting rejection of the claims is rendered moot by the present amendment to claim 1. In particular, Applicants respectfully submit that the '197 claims do not recite the amended features of claim 1.

Further, in regard to the art rejections, Applicants respectfully submit that independent claims 1, 9, and 10 recite novel features not taught or rendered obvious by the applied references.

¹ See, e.g., paragraphs [0093]-[0096], [0110], [0132], and [0152]-[0163] of the published application.

Volmat is directed to a method comprising accepting turning on a power; obtaining a first decode key when turning on the power is accepted and decoding the encoded execution starting data by a first decode key to start executing a program for a data processing apparatus; sending a request for authentication to an external apparatus after starting execution of the program for the data processing apparatus; and starting to provide the function when obtaining an authentication result indicating the apparatus is authenticated from the external apparatus.

Further, as shown in Figure 7, Volmat discloses a destination list in a video conferencing system.

However, Applicants respectfully submit that Volmat fails to disclose a transmission management apparatus configured to receive an information request signal from the first transformation terminal when the first transmission terminal is in video communication with at least the second transmission terminal, the information request signal indicating a request for information on a transmission terminal, including the second transmission terminal, with which the first transmission terminal is in video communication, the transmission states associated with the first transmission terminal and the second transmission terminal each indicating in video communication, acquire information including the identification name associated with the transmission with which the first transmission terminal is in video communication based on the transmission state from the storage medium in response to the information request signal, and transmit the acquired information to the first transmission terminal, as recited in amended claim 1.

Accordingly, Applicants respectfully submit that the rejection of claim 1 is rendered moot by the present amendment to that claim.

Further, regarding the rejection under 35 U.S.C. § 103, Applicants respectfully submit that no matter how the teachings of Ford and Tanaka are combined, the combination does not

teach or suggest a transmission management apparatus configured to receive an information request signal from the first transmission terminal when the first transmission terminal is in video communication with at least the second transmission terminal, the information request signal indicating a request for information on a transmission terminal, including the second transmission terminal, with which the first transmission terminal is in video communication, the transmission states associated with the first transmission terminal and the second transmission terminal each indicating in video communication, acquire information including the identification name associated with the transmission with which the first transmission terminal is in video communication based on the transmission state from the storage medium in response to the information request signal, and transmit the acquired information to the first transmission terminal, as recited in amended claim 1.

Accordingly, Applicant respectfully requests that the art rejections be withdrawn.

Consequently, in view of the present amendment, and in light of the above discussion, the pending claims as presented herewith are believed to be in condition for formal allowance, and an early and favorable action to that effect is respectfully requested.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Application No. 16/903,713
Reply to Office Action of April 19, 2021 and Notice of Non-Compliant Amendment of
August 16, 2021

The Commissioner is hereby authorized to charge any additional fees that may be required for papers being filed herewith and for which no payment is enclosed herewith, or credit any overpayment to Deposit Account 602325, with the EXCEPTION of deficiencies in fees for multiple dependent claims in new applications.

Respectfully Submitted,

XSENSUS, L.L.P.

/Derek P. Benke/

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Doc Code: TRAN.LET

Document Description: Transmittal Letter

PTO/SB/21 (07-09)

Approved for use through 11/30/2020. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i>	Application Number	16/903,713	
	Filing Date	17 Jun 2020	
	First Named Inventor	YOSHINAGA KATO	
	Art Unit	2652 Confirmation No. 1733	
	Examiner Name	EL-ZOOBI, MARIA	
Total Number of Pages in This Submission	12	Attorney Docket Number	16408US04CON

ENCLOSURES (Check all that apply)		
☒ Fee Transmittal Form ☐ Fee Attached ☒ Amendment/Reply ☐ After Final ☐ Affidavits/declaration(s) ☐ Extension of Time Request ☐ Express Abandonment Request ☐ Information Disclosure Statement ☐ Certified Copy of Priority Document(s) ☐ Reply to Missing Parts/ Incomplete Application ☐ Reply to Missing Parts under 37 CFR 1.52 or 1.53	☐ Drawing(s) ☐ Licensing-related Papers ☐ Petition ☐ Petition to Convert to a Provisional Application ☐ Power of Attorney, Revocation Change of Correspondence Address ☐ Terminal Disclaimer ☐ Request for Refund ☐ CD, Number of CD(s) _____ ☐ Landscape Table on CD	☐ After Allowance Communication to TC ☐ Appeal Communication to Board of Appeals and Interferences ☐ Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) ☐ Proprietary Information ☐ Status Letter ☐ Other Enclosure(s) (please identify below):
Remarks The Commissioner is hereby authorized to charge any additional fees that may be required for papers being filed herewith and for which no payment is enclosed herewith, or credit any overpayment to Deposit Account 602325.		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	XSENSUS, LLP Customer Number 154930		
Signature	/Derek P. Benke/		
Printed name	Derek P. Benke		
Date	2021-10-18	Reg. No.	56944

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:			
Signature			
Typed or printed name		Date	

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE UNITED STATES PATENT & TRADEMARK OFFICE
FEE TRANSMITTAL

Application Number	16/903,713
Filing Date	17 Jun 2020
First Named Inventor	YOSHINAGA KATO
Art Unit	2652
Examiner Name	EL-ZOOBI, MARIA
Attorney Docket Number	16408US04CON

☐ No additional fee is required

☐ Small entity status is claimed

	Claims Remaining After Amendment		Highest Number of Claims Previously Paid For	Current Extra Claims	Rate	Additional Fee
Total Claims	10	-	20	= 0	x \$ 100.00 =	\$ 0.00
Independent Claims	3	-	3	= 0	x \$ 480.00 =	\$ 0.00
APPLICATION SIZE FEE (37 CFR 1.16(s))					\$	\$
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					N/A	\$
					TOTAL	\$ 0.00
EXTENSION OF TIME						\$
REQUEST FOR RECONSIDERATION (RCE)						\$
NOTICE OF APPEAL						\$
TERMINAL DISCLAIMER						\$
						\$
						\$
TOTAL						\$ 0.00
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XSENSUS, LLP
Customer Number:

154930

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875				Application or Docket Number 16/903,713		Filing Date 06/17/2020		☐ To be Mailed	
ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO									
APPLICATION AS FILED - PART I									
		(Column 1)			(Column 2)				
FOR		NUMBER FILED	NUMBER EXTRA		RATE (\$)		FEE (\$)		
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))		N/A	N/A		N/A				
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))		N/A	N/A		N/A				
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))		N/A	N/A		N/A				
TOTAL CLAIMS (37 CFR 1.16(i))		minus 20 =	*		x \$100 =				
INDEPENDENT CLAIMS (37 CFR 1.16(h))		minus 3 =	*		x \$460 =				
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))		If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).							
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))									
* If the difference in column 1 is less than zero, enter "0" in column 2.						TOTAL			
APPLICATION AS AMENDED - PART II									
		(Column 1)			(Column 2)	(Column 3)			
AMENDMENT	10/18/2021	CLAIMS REMAINING AFTER AMENDMENT			HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	* 10	Minus	** 20	= 0			x \$100 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 3	= 0			x \$480 =	0
	☐ Application Size Fee (37 CFR 1.16(s))								
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
								TOTAL ADD'L FEE	0
		(Column 1)			(Column 2)	(Column 3)			
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT			HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=			x \$0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=			x \$0 =	
	☐ Application Size Fee (37 CFR 1.16(s))								
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
								TOTAL ADD'L FEE	
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.								LIE	
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".								/MONICA D FRANCIS/	
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".									
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.									

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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<i>Notice of References Cited</i>	Application/Control No. 16/903,713		Applicant(s)/Patent Under Reexamination KATO et al.	
	Examiner MARIA EL-ZOOBI		Art Unit 2652	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20100226546-A1	09-2010	Tanaka; Akifumi	H04N7/147	382/118
*	B	US-20070100944-A1	05-2007	Ford; Peter S.	H04L51/04	709/206
*	C	US-20120185685-A1	07-2012	VOLMAT; Alain	G06F21/572	713/2
	D					
	E					
	F					
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	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office
PTO-892 (Rev. 01-2001)

Notice of References Cited

Part of Paper No. 20211130



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/903,713	06/17/2020	Yoshinaga KATO	16408US04CON	1733
154930	7590	12/03/2021	EXAMINER	
XSENSUS LLP			EL-ZOOBI, MARIA	
100 Daingerfield Road			ART UNIT	
Suite 402			PAPER NUMBER	
Alexandria, VA 22314			2652	
			NOTIFICATION DATE	
			DELIVERY MODE	
			12/03/2021	
			ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Faith.Baggett@xsensus.com
Sandy.Miles@Xsensus.com
anaquadocketing@Xsensus.com

Notice of Pre-AIA or AIA Status

The present application is being examined under the pre-AIA first to invent provisions.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on nonstatutory double patenting provided the reference application or patent either is shown to be commonly owned with the examined application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. See MPEP § 717.02 for applications subject to examination under the first inventor to file provisions of the AIA as explained in MPEP § 2159. See MPEP § 2146 *et seq.* for applications not subject to examination under the first inventor to

Art Unit: 2652

file provisions of the AIA. A terminal disclaimer must be signed in compliance with 37 CFR

1.321(b).

The USPTO Internet website contains terminal disclaimer forms which may be used.

Please visit www.uspto.gov/patent/patents-forms. The filing date of the application in which the form is filed determines what form (e.g., PTO/SB/25, PTO/SB/26, PTO/AIA/25, or PTO/AIA/26) should be used. A web-based eTerminal Disclaimer may be filled out completely online using web-screens. An eTerminal Disclaimer that meets all requirements is auto-processed and approved immediately upon submission. For more information about eTerminal Disclaimers, refer to www.uspto.gov/patents/process/file/efs/guidance/eTD-info-l.jsp.

Claim 1 is rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 9,307,197. Although the claims at issue are not identical, they are not patentably distinct from each other because for example both claims 1 in the instant application and the patent discloses (transmission management apparatus for updating { reads on “managing”} transmission states of a plurality of transmission terminals the transmission management apparatus comprising: a storage medium {reads on “memory” in the patent} configured to store terminal information including identification names and transmission states associated with the respective transmission terminals {reads on “transmission state of each transmission terminal of the plurality of transmission terminals in association with information identifying the transmission terminal”}, wherein the transmission management apparatus is configured to: update the transmission state associated with the first transmission terminal to a transmission state indicating in video communication, based on attendance request information for video communication received from the first transmission

Art Unit: 2652

terminal {reads on “the terminal information request indicating a request for information for identifying the second transmission terminal that is currently in a communication transmission state with the one transmission terminal”}, receive an information request signal from the first transformation terminal when the first transmission terminal is in video communication with at least the second transmission terminal, the information request signal indicating a request for information, a transmission terminal, including the second transmission terminal, with which the first transmission terminal is in video communication, the transmission states associated with the first transmission terminal and the second transmission terminal each indicating in video communication {reads on “a transmission state of each transmission terminal of the plurality of transmission terminals in association with information identifying the transmission terminal; a receiver configured to receive a terminal information request from one transmission terminal that is currently in a communication transmission state through an established session with a second transmission terminal from among the plurality of transmission terminals”}; acquire information including the identification name associated with the transmission terminal with which the first transmission terminal is in video communication based on the transmission state from the storage medium in response to the information request signal {reads on “processing circuitry configured to acquire the information for identifying the second transmission terminal based on the transmission states stored by the memory in response to receiving the terminal information request”}; and transmit the acquired information to the first transmission terminal {reads on “a transmitter configured to transmit the information acquired by the processing circuitry to the one transmission terminal”}.

Therefore, it would have been obvious to one with ordinary skill in the art to modify the instant application by rewarding the claim language as indicating above to obtain the patent.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARIA EL-ZOOBI whose telephone number is (571)270-3434. The examiner can normally be reached Monday-Friday 7-4.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

Application/Control Number: 16/903,713
Art Unit: 2652

Page 6

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Ahmad Matar** can be reached on **5712727488**. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of published or unpublished applications may be obtained from Patent Center. Unpublished application information in Patent Center is available to registered users. To file and manage patent submissions in Patent Center, visit: <https://patentcenter.uspto.gov>. Visit <https://www.uspto.gov/patents/apply/patent-center> for more information about Patent Center and <https://www.uspto.gov/patents/docx> for information about filing in DOCX format. For additional questions, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MARIA EL-ZOOBI/
Primary Examiner, Art Unit 2652

<i>Index of Claims</i> 	Application/Control No. 16/903,713	Applicant(s)/Patent Under Reexamination KATO et al.
	Examiner MARIA EL-ZOOBI	Art Unit 2652

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS										
☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47										
CLAIM		DATE								
Final	Original	04/15/2021	08/11/2021	11/30/2021						
	1	✓	÷	-						
	2		÷	-						
	3		÷	-						
	4		÷	-						
	5		÷	-						
	6		÷	-						
	7		÷	-						
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	22		÷	-						
	23		÷	-						

<i>Search Notes</i> 	Application/Control No. 16/903,713	Applicant(s)/Patent Under Reexamination KATO et al.
	Examiner MARIA EL-ZOOBI	Art Unit 2652

CPC - Searched*		
Symbol	Date	Examiner

CPC Combination Sets - Searched*		
Symbol	Date	Examiner
H04L65/1509, H04M3/563, H04M3/567, H04N7/15, H04N7/152	04/15/2021	M.EL

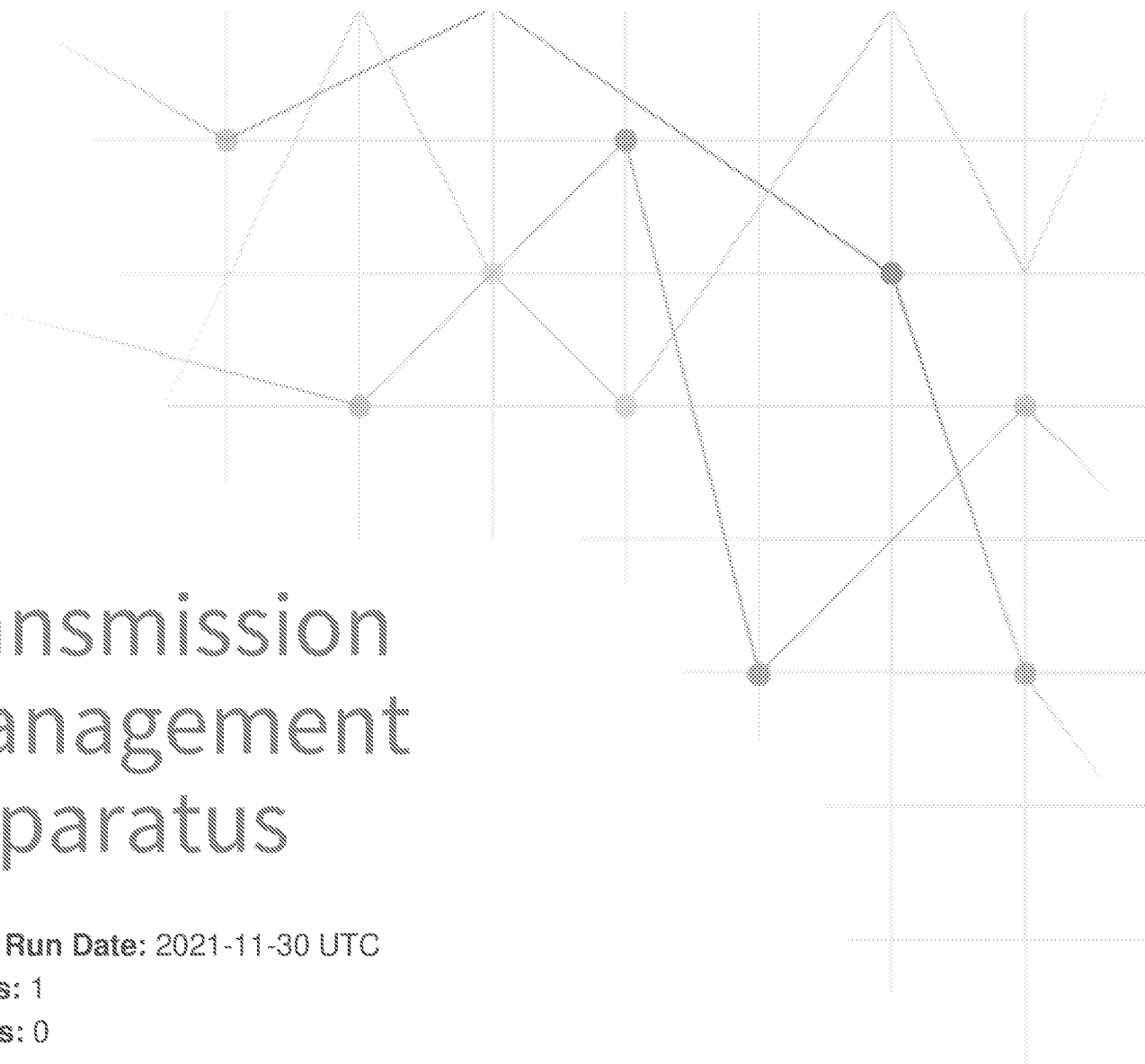
US Classification - Searched*			
Class	Subclass	Date	Examiner
348	14.02, 14.08, 14.09	04/15/2021	M.EL

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
inventor and assignee search	03/16/2021	M.EL
us and CPC search	03/16/2021	M.EL
text search	03/16/2021	M.EL
ip.com search	11/30/2021	M.EL
search is updated	11/30/2021	M.EL

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

/MARIA EL-ZOOBI/ Primary Examiner, Art Unit 2652	11/30/2021
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transmission management apparatus

Report Run Date: 2021-11-30 UTC

Queries: 1

Markers: 0

Query #	Timestamp	Results	Page
1	2021-11-30 15:11 UTC	34,192,049	3

Content: Patent Publications (164)

US Patents | US Designs | US Applications | EPO Patents | EPO Applications | China Patents | China Applications | Japan Patents | Japan Applications | Korea Patents | Korea Applications | WIPO Applications | Argentina Patents | Argentina Applications | Brazil Patents | Brazil Applications | Canada Patents | Canada Applications | Chile Patents | Chile Applications | Colombia Applications | Costa Rica Applications | Cuba Patents | Cuba Applications | Dominican Republic Applications | Ecuador Patents | Ecuador Applications | El Salvador Applications | Guatemala Applications | Honduras Applications | Mexico Patents | Mexico Applications | Nicaragua Patents | Panama Applications | Peru Applications | Trinidad & Tobago Patents | Uruguay Applications | Austria Patents | Austria Applications | Belarus Patents | Belgium Patents | Belgium Applications | Bosnia & Herzegovina Patents | Bosnia & Herzegovina Applications | Bulgaria Patents | Bulgaria Applications | Croatia Patents | Croatia Applications | Czech Republic Patents | Czech Republic Applications | Czechoslovakia Patents | Czechoslovakia Applications | Denmark Patents | Denmark Applications | Estonia Patents | Estonia Applications | EUIPO Patents | Finland Patents | Finland Applications | France Patents | France Applications | Germany Patents | Germany Applications | Great Britain Patents | Great Britain Applications | Greece Patents | Greece Applications | Hungary Patents | Hungary Applications | Iceland Patents | Iceland Applications | Ireland Patents | Ireland Applications | Italy Patents | Italy Applications | Latvia Patents | Latvia Applications | Lithuania Patents | Lithuania Applications | Luxembourg Patents | Malta Patents | Monaco Patents | Montenegro Patents | Montenegro Applications | Netherlands Patents | Netherlands Applications | Norway Patents | Norway Applications | Poland Patents | Poland Applications | Portugal Patents | Portugal Applications | Republic of Moldova Patents | Republic of Moldova Applications | Romania Patents | Romania Applications | San Marino Patents | San Marino Applications | Serbia Patents | Serbia Applications | Slovakia Patents | Slovakia Applications | Slovenia Patents | Spain Patents | Spain Applications | Sweden Patents | Sweden Applications | Switzerland Patents | Switzerland Applications | Ukraine Patents | Yugoslavia/Serbia and Montenegro Patents | Yugoslavia/Serbia and Montenegro Applications | Armenia Patents | Australia Patents | Australia Applications | Cyprus Patents | Gulf Cooperation Council Patents | Hong Kong Patents | India Patents | India Applications | Indonesia Patents | Indonesia Applications | Israel Applications | Jordan Patents | Kyrgyzstan Patents | Macao Applications | Malaysia Patents | Mongolia Patents | New Zealand Patents | Philippines Patents | Philippines Applications | Saudi Arabia Patents | Singapore Patents | Singapore Applications | Taiwan Patents | Taiwan Applications | Tajikistan Patents | Tajikistan Applications | Thailand Applications | Uzbekistan Patents | Vietnam Patents | Algeria Patents | ARIPO Patents | ARIPO Applications | Egypt Patents | Kenya Patents | Malawi Patents | Morocco Patents | Morocco Applications | OAPI Patents | South Africa Patents | Tunisia Applications | Zambia Patents | Zimbabwe Patents | EAPO Patents | EAPO Applications | Georgia Patents | Georgia Applications | Kazakhstan Patents | Kazakhstan Applications | Russia Patents | Russia Applications | Turkey Patents | Turkey Applications

1 2021-11-30 15:11 UTC | 34,192,049 results from 

De-Dup: None | Cut-off: None | Sort: Relevance

Main Concept: Text

updating transmission state of terminal to indicate in video communication state

Concept Modifiers: None

Filters: None

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	6,001	((terminal devcie) near2 (ID identification identity name))and state and conferenc\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/11/30 10:23
L2	12,158	(H04L65/1509 H04M3/563 H04M3/567 H04N7/15 H04N7/152).cpc.	US-PGPUB; USPAT	OR	OFF	2021/11/30 10:24
L3	636	1 and L2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/11/30 10:24
L4	2,273	((terminal devcie) near2 (ID identification identity name))and (state with (updat\$3 modif\$4 manag\$3 chang\$3)) and conferenc\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/11/30 10:25
L5	377	4 and 2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/11/30 10:25
L6	1,612	((terminal devcie) near2 (ID identification identity name))and (state near3 (updat\$3 modif\$4 manag\$3 chang\$3)) and conferenc\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/11/30 10:26
L7	323	6 and 2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/11/30 10:26
S1	1	16/903713	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/03/15 08:29
S2	22,202	((("RICOH") near3 ("COMPANY") near3 ("LTD"))).AS,AANM.	USPAT	OR	OFF	2021/03/15 08:29
S3	143	((("KATO") near3 ("Yoshinaga"))).INV.	US-PGPUB	OR	OFF	2021/03/15 08:29

S4	33	((("OKUYAMA") near3 ("Taro"))).INV.	US-PGPUB	OR	OFF	2021/03/15 08:29
S5	7	15/442787 13/989665 15/041570	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/03/15 08:34
S6	22,372	S2 S3 S4 S5	US-PGPUB; USPAT	OR	OFF	2021/03/15 08:35
S7	679	S6 and (management near1 table)".clm" and (terminal near1 state).clm. and identifier.clm.	US-PGPUB; USPAT	OR	OFF	2021/03/15 08:36
S8	679	S6 and (management near1 table)".clm" and (terminal near1 state).clm. and identifier.clm. and request.clm. and name.dm.	US-PGPUB; USPAT	OR	OFF	2021/03/15 08:37
S9	679	S6 and (management near1 table)".clm" and (terminal adj state).clm. and identifier.clm. and request.clm. and name.dm.	US-PGPUB; USPAT	OR	OFF	2021/03/15 08:38
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S13	3	S5 and ((management near1 table)and (terminal adj state) and identifier and request and name).clm.	US-PGPUB; USPAT	OR	OFF	2021/03/15 08:39
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S16	2	"20120185685"	US-PGPUB; USPAT	OR	OFF	2021/03/15 10:51
S17	11,054	348/14.01-14.08.cds.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/03/16 06:58

S18	11,621	(H04L65/1509 H04M3/563 H04M3/567 H04N7/15 H04N7/152).cpc.	US-PGPUB; USPAT	OR	OFF	2021/03/16 07:00
S19	11,316	S18 AND ((H04N7/15 OR H04N7/147 OR H04N7/152 OR H04N7/142 OR H04N7/157 OR H04N2007/145 OR H04L65/403 OR H04L12/1822 OR H04L12/1818 OR H04M3/567).CPC.)	US-PGPUB; USPAT	OR	OFF	2021/03/16 07:04
S20	4	15/442787 "10,735689".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/11/30 08:15
S21	2	"10,735689".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/11/30 09:07

11/30/2021 10:27:13 AM

C:\Users\melzoobi\Documents\EAST\Workspaces\16903713.wsp

DOCKET NO: 16408US04CON

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
YOSHINAGA KATO : EXAMINER: EL-ZOOBI, MARIA
SERIAL NO: 16/903,713 :
FILED: JUNE 17, 2020 : GROUP ART UNIT: 2652
FOR: TRANSMISSION MANAGEMENT :
APPARATUS

AMENDMENT UNDER 37 C.F.R. § 1.114

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

Commissioner:

In response to the Office Action dated December 3, 2021, the following is submitted in connection with the above-identified application.

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A transmission management apparatus for updating attendance ~~transmission~~ states of a plurality of transmission terminals including a first transmission terminal and a second transmission terminal, the transmission management apparatus comprising:

a storage medium configured to store ~~therein~~ first terminal information including a first identification name ~~names~~ and an attendance state ~~transmission-states~~ associated with the respective first transmission terminal, and second information including a second identification name and an attendance state associated with the second transmission terminal ~~terminals~~, wherein

the transmission management apparatus is configured to:

update the attendance ~~transmission~~ state associated with the first transmission terminal to a ~~transmission~~ state indicating that the first transmission terminal is attending a ~~[[in]]~~ video communication, based on attendance request information for video communication received from the first transmission terminal;

update, when the second transmission terminal attends the video communication, the attendance state associated with the second transmission terminal to a state indicating that the second transmission terminal is attending the video communication;

~~receive an information request signal from the first transformation terminal when the first transmission terminal is in video communication with at least the second transmission terminal, the information request signal indicating a request for information on a transmission terminal, including the second transmission terminal, with which the first transmission terminal~~

~~is in video communication, the transmission states associated with the first transmission terminal and the second transmission terminal each indicating in video communication;~~

acquire information including ~~[[the]]~~ an identification name associated with ~~[[the]]~~ a transmission terminal with which ~~the first transmission terminal is in video communication based on the transmission state~~ an attendance state is associated and in which the attendance state indicates that the transmission terminal is attending the video communication,
from the storage medium ~~in response to the information request signal;~~ and

transmit the acquired information to the first transmission terminal, wherein the acquired information is used in order to

display an identification name list of sites including the first transmission terminal and the second transmission terminal which are attending the video communication during the video communication.

2. (Currently Amended) The transmission management apparatus of claim 1, wherein the storage medium stores a terminal management table that contains the ~~first terminal~~ information.

3. (Currently Amended) The transmission management apparatus of claim 1, wherein the storage medium stores identifiers for identifying the ~~respective~~ first and second transmission terminals.

4. (Previously Presented) The transmission management apparatus of claim 1, wherein the identification name associated with a particular transmission terminal of the plurality of

transmission terminals is information to be registered or changed in response to a request from the particular transmission terminal.

5. (Previously Presented) The transmission management apparatus of claim 1, wherein other transmission terminals of the plurality of transmission terminals, which are other than the first transmission terminal and are attending a same conference, transmit or receive at least one of image data and sound data to or from each other via a relaying apparatus.

6. (Previously Presented) The transmission management apparatus of claim 1, wherein each of the plurality of transmission terminals is one of a video conference terminal, a car navigation device, and a cell phone.

7. (Currently Amended) The transmission management apparatus of claim 1, wherein the identification name ~~names~~ that ~~that~~ is stored ~~is~~ is associated with identification information transmitted from the plurality of transmission terminals.

8. (Previously Presented) The transmission management apparatus of claim 1, wherein a destination list associated with identification information transmitted from the first transmission terminal is stored, and the destination list registers at least the second transmission terminal as a destination candidate.

9. (Currently Amended) A method comprising:

updating, by a transmission management apparatus, attendance ~~transmission~~ states of a plurality of transmission terminals including a first transmission terminal and a second transmission terminal;

storing, in a storage medium, first ~~terminal~~ information including a first identification ~~names~~ name and an attendance state ~~transmission states~~ associated with the first respective transmission ~~terminal~~, and second information including a second identification name and an attendance state associated with the second transmission terminal ~~terminals~~;

updating, by the transmission management apparatus, the attendance ~~transmission~~ state associated with the first transmission terminal to a ~~transmission~~ state indicating that the first transmission terminal is attending a [[in]] video communication, based on attendance request information for video communication received from the first transmission terminal;

updating, by the transmission management apparatus, when the second transmission terminal attends the video communication, the attendance state associate with the second transmission terminal to a state indicating that the second transmission terminal is attending the video communication;

~~receiving, by the transmission management apparatus, an information request signal from the first transformation terminal when the first transmission terminal is in video communication with at least the second transmission terminal, the information request signal indicating a request for information on a transmission terminal, including the second transmission terminal, with which the first transmission terminal is in video communication; the transmission states associated with the first transmission terminal and the second transmission terminal each indicating in video communication;~~

acquiring, by the transmission management apparatus, information including [[the]] an identification name associated with [[the]] a transmission terminal with which ~~the first~~ transmission terminal is in video communication based on the transmission state an attendance state is associated and in which the attendance state indicates that the transmission terminal is attending the video communication, from the storage medium ~~in response to the information~~ request signal; and

transmitting, by the transmission management apparatus, the acquired information to the first transmission terminal, wherein the acquired information is used for displaying an identification name list of sites including the first transmission terminal and the second transmission terminal which are attending the video communication during the video communication.

10. (Currently Amended) A system comprising:

a first transmission terminal; and

~~a transmission management apparatus for updating transmission states of a plurality of~~ transmission terminals including the first transmission terminal and a second transmission terminal, the transmission management apparatus comprising:

a storage medium configured to store ~~therein terminal~~ first information including an identification name ~~names~~ and ~~transmission states~~ an attendance state associated with the respective first transmission terminals terminal, and second information including an identification name and an attendance state associated with a second transmission terminal,

wherein the ~~transmission~~ management apparatus is configured to:

update the ~~transmission~~ attendance state associated with the first transmission terminal to a ~~transmission~~ state indicating that the first transmission terminal is attending ~~[[in]]~~ a video communication, based on attendance request information for video communication received from the first transmission terminal,

update, when the second transmission terminal attends the video communication, the attendance state associated with the second transmission terminal to a state indicating that the second transmission terminal is attending the video communication,

~~receive an information request signal from the first transmission terminal when the first transmission terminal is in video communication with at least the second transmission terminal, the information request signal indicating a request for information on a transmission terminal, including the second transmission terminal, with which the first transmission terminal is in video communication, the transmission states associated with the first transmission terminal and the second transmission terminal each indicating in video communication;~~

acquire information including ~~[[the]]~~ an identification name associated with ~~[[the]]~~ a transmission terminal with which ~~the first transmission terminal is in video communication based on the transmission state~~ an attendance state is associated and in which the attendance state indicates that the transmission terminal is attending the video communication, from the storage medium ~~in response to the information request signal,~~ and

transmit the acquired information to the first transmission terminal, and

the first transmission terminal is configured to:

receive the acquired information from the management apparatus, and

display an identification name list of sites including the first transmission terminal and the second transmission terminal which are attending the video communication, based on the acquire information during the video communication.

11. (New) The system of claim 10, wherein the management apparatus is configured to:
receive an information request signal from the first transformation terminal when the first transmission terminal is in video communication with at least the second transmission terminal, the information request signal indicating a request for information on a transmission terminal, including the second transmission terminal, with which the first transmission terminal is in video communication, the attendance states associated with the first transmission terminal and the second transmission terminal each indicating in video communication.

12. (New) The transmission management apparatus of claim 1, wherein the transmission management apparatus is composed of one or more computers.

13. (New) The method of claim 9, wherein the transmission management apparatus is composed of one or more computers.

14. (New) The system of claim 10, wherein the transmission management apparatus is composed of one or more computers.

15. (New) The transmission management apparatus of claim 1, wherein the transmission management apparatus is configured to:

receive an information request signal from the first transmission terminal when the first transmission terminal is in video communication with at least the second transmission terminal, the information request signal indicating a request for information on a transmission terminal, including the second transmission terminal, with which the first transmission terminal is in video communication, the attendance states associated with the first transmission terminal and the second transmission terminal each indicating in video communication.

16. (New) The method of claim 9, further comprising:

receiving, by the transmission management apparatus, an information request signal from the first transmission terminal when the first transmission terminal is in video communication with at least the second transmission terminal, the information request signal indicating a request for information on a transmission terminal, including the second transmission terminal, with which the first transmission terminal is in video communication, the attendance states associated with the first transmission terminal and the second transmission terminal each indicating in video communication.

Electronic Acknowledgement Receipt	
EFS ID:	45135773
Application Number:	16903713
International Application Number:	
Confirmation Number:	1733
Title of Invention:	TRANSMISSION MANAGEMENT APPARATUS
First Named Inventor/Applicant Name:	Yoshinaga KATO
Customer Number:	154930
Filer:	Derek P. Benke/Kaoru Saito
Filer Authorized By:	Derek P. Benke
Attorney Docket Number:	16408US04CON
Receipt Date:	03-MAR-2022
Filing Date:	17-JUN-2020
Time Stamp:	12:41:56
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$1360
RAM confirmation Number	E202233C42114437
Deposit Account	
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The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		16408US04CON_Response_RCE_FOA_12032021-signed.pdf	299010	yes	13
			99ed68106e58574c81c5bd3a0882ebfc3739ef39		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Request for Continued Examination (RCE)		1	1	
	Fee Worksheet (SB06)		2	2	
	Amendment Submitted/Entered with Filing of Continued Prosecution Application (CPA)/Request for Continued Examination(RCE)		3	3	
	Claims		4	11	
	Applicant Arguments/Remarks Made in an Amendment		12	13	
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	37945	no	2
			c14b822fe414640d2373422a3db84ed7b32842a9		
Warnings:					
Information:					
Total Files Size (in bytes):			336955		

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**Request
for
Continued Examination (RCE)
Transmittal**

Address to:
Mail Stop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Application Number	16/903,713
Filing Date	17 Jun 2020
First Named Inventor	YOSHINAGA KATO
Art Unit	2652 Confirmation No. 1733
Examiner Name	EL-ZOOBI, MARIA
Attorney Docket Number	16408US04CON

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

1. **Submission required under 37 CFR 1.114** Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).
- a. ☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.
- i. ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ii. ☐ Other _____
- b. ☒ Enclosed
- i. ☒ Amendment/Reply
- iii. ☐ Information Disclosure Statement (IDS)
- ii. ☐ Affidavit(s)/ Declaration(s)
- iv. ☐ Other _____
2. **Miscellaneous**
- a. ☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of _____ months. (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)
- b. ☐ Other _____
3. **Fees** The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.
- a. ☒ The Director is hereby authorized to charge the following fees, any underpayment of fees, or credit any overpayments, to Deposit Account No. 602325.
- i. ☒ RCE fee required under 37 CFR 1.17(e)
- ii. ☐ Extension of time fee (37 CFR 1.136 and 1.17)
- iii. ☐ Other _____
- b. ☐ Check in the amount of \$ _____ enclosed
- c. ☐ Payment by credit card (Form PTO-2038 enclosed)
- d. ☒ Payment by EFS-Web

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

Signature	/Derek P. Benke/	Date	2022-3-3
Name (Print/Type)	Derek P. Benke	Registration No.	56,944

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being EFS-Web transmitted to the United States Patent and Trademark Office (USPTO), deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 or facsimile transmitted to the USPTO on the date shown below.			
Signature		Date	
Name (Print/Type)		Date	

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended, and in light of the following discussion, is respectfully requested.

Claims 1–16 are pending in this application, claims 1-3, 7, 9, and 10 having been presently amended; and claims 11-16 having been added. Support for amended claims 1-3, 7, 9, and 10, and new claims 11-16 can be found in the original claims, drawings, and specification as filed.¹ No new matter has been added.

In the Office Action, claim 1 is rejected on the ground of nonstatutory double patenting as unpatentable over claims 1-7 of U.S. Patent No. 9,307,197. In response, Applicant respectfully submits that this rejection is moot in view of the amendments to claim 1. Claim 1 of this application is patentably distinct from claim 1 of U.S. Patent No. 9,307,197 because, for example, it includes the features of “update, when the second transmission terminal attends the video communication, the attendance state associated with the second transmission terminal to a state indicating that the second transmission terminal is attending the video communication” and the transmission management apparatus is configured to “transmit the acquired information to the first transmission terminal, wherein the acquired information is used in order to display an identification name list of sites including the first transmission terminal and the second transmission terminal which are attending the video communication during the video communication” which are not present in claim 1 of U.S. Patent No. 9,307,197.

Consequently, in view of the present amendment, and in light of the above discussion, the pending claims as presented herewith are believed to be in condition for formal allowance, and an early and favorable action to that effect is respectfully requested.

¹ See, e.g., paragraphs [0096], [0129]-[0134], [0154]-[0163], and [0167] of the published application.

Application No. 16/903,713
Reply to Office Action of December 3, 2021

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

The Commissioner is hereby authorized to charge any additional fees that may be required for papers being filed herewith and for which no payment is enclosed herewith, or credit any overpayment to Deposit Account 602325, with the EXCEPTION of deficiencies in fees for multiple dependent claims in new applications.

Respectfully Submitted,

XSENSUS, L.L.P.

/Derek P. Benke/

Derek P. Benke
Attorney of Record
Registration No. 56,944
Phone No. (571) 376-6306

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100 Daingerfield Rd, Suite 402
Alexandria, VA 22314

IN THE UNITED STATES PATENT & TRADEMARK OFFICE
FEE TRANSMITTAL

Application Number	16/903,713
Filing Date	17 Jun 2020
First Named Inventor	YOSHINAGA KATO
Art Unit	2652
Examiner Name	EL-ZOOBI, MARIA
Attorney Docket Number	16408US04CON

☐ No additional fee is required

☐ Small entity status is claimed

	Claims Remaining After Amendment		Highest Number of Claims Previously Paid For	Current Extra Claims	Rate	Additional Fee
Total Claims	16	-	23	= 0	x \$ 100.00 =	\$ 0.00
Independent Claims	3	-	4	= 0	x \$ 480.00 =	\$ 0.00
APPLICATION SIZE FEE (37 CFR 1.16(s))					\$	\$
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					N/A	\$
					TOTAL	\$ 0.00
EXTENSION OF TIME						\$
REQUEST FOR RECONSIDERATION (RCE)						\$ 1,360.00
NOTICE OF APPEAL						\$
TERMINAL DISCLAIMER						\$
						\$
						\$
TOTAL						\$ 1,360.00
The Commissioner is hereby authorized to charge any additional fees that may be required for papers being filed herewith and for which no payment is enclosed herewith, or credit any overpayment to Deposit Account 602325						

XSENSUS, LLP
Customer Number:

154930

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875				Application or Docket Number 16/903,713		Filing Date 06/17/2020		☐ To be Mailed	
ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO									
APPLICATION AS FILED - PART I									
		(Column 1)			(Column 2)				
FOR		NUMBER FILED	NUMBER EXTRA		RATE (\$)		FEE (\$)		
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))		N/A	N/A		N/A				
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))		N/A	N/A		N/A				
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))		N/A	N/A		N/A				
TOTAL CLAIMS (37 CFR 1.16(i))		minus 20 =	*		x \$100 =				
INDEPENDENT CLAIMS (37 CFR 1.16(h))		minus 3 =	*		x \$460 =				
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))		If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).							
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))									
* If the difference in column 1 is less than zero, enter "0" in column 2.						TOTAL			
APPLICATION AS AMENDED - PART II									
		(Column 1)			(Column 2)	(Column 3)			
AMENDMENT	03/03/2022	CLAIMS REMAINING AFTER AMENDMENT			HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	* 16	Minus	** 23		= 0		x \$100 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 4		= 0		x \$480 =	0
	☐ Application Size Fee (37 CFR 1.16(s))								
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
								TOTAL ADD'L FEE	0
		(Column 1)			(Column 2)	(Column 3)			
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT			HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	*	Minus	**		=		x \$0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***		=		x \$0 =	
	☐ Application Size Fee (37 CFR 1.16(s))								
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
								TOTAL ADD'L FEE	
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.								LIE	
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".								/JASON B EADDY/	
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".									
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.									

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Patent Application Fee Transmittal				
Application Number:		16903713		
Filing Date:		17-Jun-2020		
Title of Invention:		TRANSMISSION MANAGEMENT APPARATUS		
First Named Inventor/Applicant Name:		Yoshinaga KATO		
Filer:		Derek P. Benke/Kaoru Saito		
Attorney Docket Number:		16408US04CON		
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
RCE- 1ST REQUEST	1801	1	1360	1360
Total in USD (\$)				1360

<i>Notice of References Cited</i>	Application/Control No. 16/903,713		Applicant(s)/Patent Under Reexamination KATO et al.	
	Examiner MARIA EL-ZOOBI		Art Unit 2652	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20100226546-A1	09-2010	Tanaka; Akifumi	H04N7/147	382/173
*	B	US-20070100944-A1	05-2007	Ford; Peter S.	H04L51/04	709/206
*	C	US-20120185685-A1	07-2012	VOLMAT; Alain	G06F21/572	713/2
	D					
	E					
	F					
	G					
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office
PTO-892 (Rev. 01-2001)

Notice of References Cited

Part of Paper No. 20220330



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/903,713	06/17/2020	Yoshinaga KATO	16408US04CON	1733
154930	7590	04/05/2022	EXAMINER	
XSENSUS LLP			EL-ZOOBI, MARIA	
100 Daingerfield Road			ART UNIT	
Suite 402			PAPER NUMBER	
Alexandria, VA 22314			2652	
			NOTIFICATION DATE	
			DELIVERY MODE	
			04/05/2022	
			ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Faith.Baggett@xsensus.com
Sandy.Miles@Xsensus.com
anaquadocketing@Xsensus.com

Notice of Pre-AIA or AIA Status

The present application is being examined under the pre-AIA first to invent provisions.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of pre-AIA 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-4, 6-16 are rejected under pre-AIA 35 U.S.C. 102(a)(1) as being unpatentable by Volmat (US 20120185685).

Regarding claim 1, Volmat teaches, transmission management apparatus for updating attendance states of a plurality of transmission terminals including a first transmission terminal and a second transmission terminal (Fig. 4, el. 50 and Paragraph 76), the transmission management apparatus comprising:

a storage medium (Fig. 5B) configured to store information including a first identification name and an attendance state associated with the first transmission terminal, and second information including a second identification name and an attendance state associated with the second transmission terminal (Fig. 5B and Paragraph 71) wherein the transmission management apparatus is configured to:

update the attendance state associated with the first transmission terminal to a state indicating that the first transmission terminal is attending a video communication, based on attendance request information for video communication received from the first transmission terminal (Paragraph 73, 76-80; whenever a terminal go on line and having communication the online status will reflect that)

update, when the second transmission terminal attends the video communication, the attendance state associated with the second transmission terminal to a state indicating that the second transmission terminal is attending the video communication (Paragraph 73, 76-80);

acquire information including [[the]] an identification name associated with [[the]] a transmission terminal with which an attendance state is associated and in which the attendance state indicates that the transmission terminal is attending the video communication, from the storage medium and transmit the acquired information to the first transmission terminal (Paragraph 77-79, terminal ID and name is requested),

wherein the acquired information is used in order to display an identification name list of sites including the first transmission terminal and the second transmission terminal which are attending the video communication during the video communication (Fig. 6, and Paragraph 82, 96, 99).

Regarding claim 2, Volmat teaches, wherein the storage medium stores a terminal management table that contains the first information (Fig. 5B, could read on terminal ID, name, status, IP address).

Regarding claim 3, Volmat teaches, wherein the storage medium stores identifiers for identifying the first and second transmission terminals (Fig. 5B, Terminal ID and name).

Regarding claim 4, Volmat teaches, wherein the identification name associated with a particular transmission terminal of the plurality of transmission terminals is information to be registered or changed in response to a request from the particular transmission terminal (Fig. 5B, each terminal is associated with an ID and a name and IP address, the status is updated based on terminal current status, off, or in communication, etc.).

Regarding claim 6, Volmat teaches, wherein each of the plurality of transmission terminals is one of a video conference terminal, a car navigation device, and a cell phone (Paragraph 73; video conference terminal)

Regarding claim 7, Volmat teaches, wherein the identification name names that [[are]] is stored [[are]] is associated with identification information transmitted from the plurality of transmission terminals (Fig. 5B).

Regarding claim 8, Volmat teaches, wherein a destination list associated with identification information transmitted from the first transmission terminal is stored, and the destination list registers at least the second transmission terminal as a destination candidate (Fig. 5C and Fig. 4, el. 5004 and Paragraph 67, 69, 73, 78).

Regarding claim 9, see claim 1 rejection.

Regarding claim 10, see claim 1 rejection “system see Fig. 1”.

Regarding claim 11, Volmat teaches, wherein the management apparatus is configured to: receive an information request signal from the first transformation terminal when the first transmission terminal is in video communication with at least the second transmission terminal, the information request signal indicating a request for information on a transmission terminal (Paragraph 73, 76, 91-92, 95), including the second transmission terminal, with which the first

Art Unit: 2652

transmission terminal is in video communication, the attendance states associated with the first transmission terminal and the second transmission terminal each indicating in video communication (Paragraph 73, 76, 91-92, 95).

Regarding claim 12, Volmat teaches, wherein the transmission management apparatus is composed of one or more computers (Fig. 4, el. 50: server).

Regarding claim 13, Volmat teaches, wherein the transmission management apparatus is composed of one or more computers (Fig. 4, el. 10).

Regarding claim 14, Volmat teaches, wherein the transmission management apparatus is composed of one or more computers (Fig. 4, el. 50: server).

Regarding claim 15, Volmat teaches, wherein the transmission management apparatus is configured to: receive an information request signal from the first transformation terminal when the first transmission terminal is in video communication with at least the second transmission terminal (Paragraph 73, 76, 91-92, 95), the information request signal indicating a request for information on a transmission terminal, including the second transmission terminal, with which the first transmission terminal is in video communication, the attendance states associated with the first transmission terminal and the second transmission terminal each indicating in video communication (Paragraph 73, 76, 91-92, 95).

Regarding claim 16, Volmat teaches, receiving, by the transmission management apparatus, an information request signal from the first transformation terminal when the first transmission terminal is in video communication with at least the second transmission terminal, the information request signal indicating a request for information on a transmission terminal, including the second transmission terminal (Paragraph 73, 76, 91-92, 95), with which the first

Art Unit: 2652

transmission terminal is in video communication, the attendance states associated with the first transmission terminal and the second transmission terminal each indicating in video communication (Paragraph 73, 76, 91-92, 95).

Claim Rejections - 35 USC § 103

The following is a quotation of pre-AIA 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Volmat (US 20120185685) in view of Halavy (US 20100194847).

Regarding claim 5, Volmat teaches, wherein other transmission terminals of the plurality of transmission terminals, which are other than the first transmission terminal and are attending a same conference (Paragraph 73).

Volmat does not teach transmit or receive at least one of image data and sound data to or from each other via a relaying apparatus.

Halavy teaches in a video conference environment, a relaying apparatus for transmit/receive image and sound data between terminals (abstract).

Therefore, it would have been obvious to one with ordinary skill in the art to modify Volmat with Halavy in order to improve the system and achieve, fast, reliable results.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiners should be directed to MARIA EL-ZOOBI whose telephone number is (571)270-3434. The examiner can normally be reached Monday-Friday 7-4.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Ahmad Matar** can be reached on **5712727488**. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of published or unpublished applications may be obtained from Patent Center. Unpublished application information in Patent Center is available to registered users. To file and manage patent submissions in Patent Center, visit: <https://patentcenter.uspto.gov>. Visit <https://www.uspto.gov/patents/apply/patent-center> for more information about Patent Center and <https://www.uspto.gov/patents/docx> for information about filing in DOCX format. For additional questions, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 16/903,713

Page 8

Art Unit: 2652

/MARIA EL-ZOOBI/

Primary Examiner, Art Unit 2652

<i>Index of Claims</i> 	Application/Control No. 16/903,713	Applicant(s)/Patent Under Reexamination KATO et al.
	Examiner MARIA EL-ZOOBI	Art Unit 2652

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS										
☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47										
CLAIM		DATE								
Final	Original	04/15/2021	08/11/2021	11/30/2021	03/10/2022	03/30/2022				
	1	✓	÷	✓	✓	✓				
	2		÷	✓	✓	✓				
	3		÷	✓	✓	✓				
	4		÷	✓	✓	✓				
	5		÷	✓	✓	✓				
	6		÷	✓	✓	✓				
	7		÷	✓	✓	✓				
	8		÷	✓	✓	✓				
	9		÷	✓	✓	✓				
	10		÷	✓	✓	✓				
	11		÷	-	✓	✓				
	12		÷	-	✓	✓				
	13		÷	-	✓	✓				
	14		÷	-	✓	✓				
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	16		÷	-	✓	✓				
	17		÷	-	-					
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	20		÷	-	-					
	21		÷	-	-					
	22		÷	-	-					
	23		÷	-	-					

<i>Search Notes</i> 	Application/Control No. 16/903,713	Applicant(s)/Patent Under Reexamination KATO et al.
	Examiner MARIA EL-ZOOBI	Art Unit 2652

CPC - Searched*		
Symbol	Date	Examiner
H04L65/1509, H04M3/563, H04M3/567, H04N7/15, H04N7/152	03/30/2022	M.EL

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner
348	14.02, 14.08, 14.09	04/15/2021	M.EL

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
inventor and assignee search	03/16/2021	M.EL
us and CPC search	03/16/2021	M.EL
text search	03/16/2021	M.EL
ip.com search	11/30/2021	M.EL
search is updated	11/30/2021	M.EL
search is updated	03/10/2022	M.EL
search is updated	03/30/2022	M.EL

/MARIA EL-ZOOBI/ Primary Examiner, Art Unit 2652	3/30/2022
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<i>Search Notes</i> 	Application/Control No. 16/903,713	Applicant(s)/Patent Under Reexamination KATO et al.
	Examiner MARIA EL-ZOOBI	Art Unit 2652

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

/MARIA EL-ZOOBI/ Primary Examiner, Art Unit 2652	3/30/2022
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PE2E SEARCH - Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
L1	1	16/903713	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	OFF	OFF	2021/03/15 08:29 AM
L2	22202	((("RICOH") near3 ("COMPANY") near3 ("LTD"))).AS,AANM.	(USPAT)	OR	OFF	OFF	2021/03/15 08:29 AM
L3	143	((("KATO") near3 ("Yoshinaga"))).INV.	(US-PGPUB)	OR	OFF	OFF	2021/03/15 08:29 AM
L4	33	((("OKUYAMA") near3 ("Taro"))).INV.	(US-PGPUB)	OR	OFF	OFF	2021/03/15 08:29 AM
L5	7	15/442787 13/989665 15/041570	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	OFF	OFF	2021/03/15 08:34 AM
L6	22372	L2 L3 L4 L5	(US-PGPUB; USPAT)	OR	OFF	OFF	2021/03/15 08:35 AM
L7	679	L6 and (management near1 table)".clm" and (terminal near1 state).clm. and identifier.clm.	(US-PGPUB; USPAT)	OR	OFF	OFF	2021/03/15 08:36 AM
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L9	679	L6 and (management near1 table)".clm" and (terminal adj state).clm. and identifier.clm. and request.clm. and name.clm.	(US-PGPUB; USPAT)	OR	OFF	OFF	2021/03/15 08:38 AM
L10	679	L6 and (management near1 table)".clm." and (terminal adj state).clm. and identifier.clm. and request.clm. and name.clm.	(US-PGPUB; USPAT)	OR	OFF	OFF	2021/03/15 08:38 AM
L11	679	L7 and (management near1 table)".clm." and (terminal adj state).clm. and identifier.clm. and request.clm. and name.clm.	(US-PGPUB; USPAT)	OR	OFF	OFF	2021/03/15 08:39 AM
L12	7	L5 and (management near1 table)".clm." and	(US-PGPUB; USPAT)	OR	OFF	OFF	2021/03/15 08:39 AM

L13	3	(terminal adj state).clm. and identifier.clm. and request.clm. and name.clm. L5 and ((management near1 table)and (terminal adj state) and identifier and request and name).clm.	(US-PGPUB; USPAT)	OR	OFF	OFF	2021/03/15 08:39 AM
L14	2	"20120185685"	(US-PGPUB; USPAT)	OR	OFF	OFF	2021/03/15 08:51 AM
L15	1	"9,307197".pn.	(US-PGPUB; USPAT)	OR	OFF	OFF	2021/03/15 08:53 AM
L16	2	"20120185685"	(US-PGPUB; USPAT)	OR	OFF	OFF	2021/03/15 10:51 AM
L17	11054	348/14.01-14.08.ccls.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	OFF	OFF	2021/03/16 06:58 AM
L18	11621	(H04L65/1509 H04M3/563 H04M3/567 H04N7/15 H04N7/152).cpc.	(US-PGPUB; USPAT)	OR	OFF	OFF	2021/03/16 07:00 AM
L19	11316	L18 AND ((H04N7/15 OR H04N7/147 OR H04N7/152 OR H04N7/142 OR H04N7/157 OR H04N2007/145 OR H04L65/403 OR H04L12/1822 OR H04L12/1818 OR H04M3/567).CPC.)	(US-PGPUB; USPAT)	OR	OFF	OFF	2021/03/16 07:04 AM
L20	4	15/442787 "10,735689".pn.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	OFF	OFF	2021/11/30 08:15 AM
L21	2	"10,735689".pn.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	OFF	OFF	2021/11/30 09:07 AM
L22	6001	((terminal devcie) near2 (ID identification identity name))and state and conferenc\$3	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/11/30 10:23 AM
L23	12158	(H04L65/1509 H04M3/563 H04M3/567 H04N7/15 H04N7/152).cpc.	(US-PGPUB; USPAT)	OR	OFF	OFF	2021/11/30 10:24 AM
L24	636	L22 and L23	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/11/30 10:24 AM
L25	2273	((terminal devcie) near2	(US-PGPUB; USPAT;	OR	ON	ON	2021/11/30

L26	377	(ID identification identity name))and (state with (updat\$3 modif\$4 manag\$3 chang\$3)) and conferenc\$3 L25 and L23	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB) (US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	10:25 AM 2021/11/30 10:25 AM
L27	1612	((terminal devcie) near2 (ID identification identity name))and (state near3 (updat\$3 modif\$4 manag\$3 chang\$3)) and conferenc\$3 L27 and L23	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/11/30 10:26 AM
L28	323	L27 and L23	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/11/30 10:26 AM
L29	31301	2 3 4	(US-PGPUB; USPAT)	OR	ON	ON	2022/03/30 05:29 AM
L30	38	29 AND attend\$4.clm.	(US-PGPUB; USPAT)	OR	ON	ON	2022/03/30 05:30 AM
L31	5	29 AND attend\$4.clm. AND state.clm.	(US-PGPUB; USPAT)	OR	ON	ON	2022/03/30 05:32 AM
L32	3	"9,307197".pn. "9,621848".pn. "10,735689".pn.	(US-PGPUB; USPAT)	OR	ON	ON	2022/03/30 05:45 AM
L33	1	"9,621848".pn.	(US-PGPUB; USPAT)	OR	ON	ON	2022/03/30 05:45 AM
L34	1	"10,735689".pn.	(US-PGPUB; USPAT)	OR	ON	ON	2022/03/30 05:46 AM
L35	3	L34 L33 L32	(US-PGPUB; USPAT)	OR	ON	ON	2022/03/30 05:47 AM
L36	1	35 AND attend\$4.clm.	(US-PGPUB; USPAT)	OR	ON	ON	2022/03/30 05:47 AM
L37	1	35 AND attend\$4.clm. AND state.clm.	(US-PGPUB; USPAT)	OR	ON	ON	2022/03/30 05:47 AM
L38	5	"20120185685" "20070100944" "20100226546"	(US-PGPUB; USPAT)	OR	ON	ON	2022/03/30 05:50 AM
L39	0	35 AND attend\$4.clm. AND updat\$3.clm.	(US-PGPUB; USPAT)	OR	ON	ON	2022/03/30 06:02 AM
L40	711	(video near1 conferenc\$3) SAME (multiple multi plurality) WITH MCU	(US-PGPUB; USPAT)	OR	ON	ON	2022/03/30 11:39 AM
L41	469	(video near1 conferenc\$3) WITH (multiple multi plurality) WITH MCU	(US-PGPUB; USPAT)	OR	ON	ON	2022/03/30 11:40 AM
L42	4	(video near1	(US-PGPUB; USPAT)	OR	ON	ON	2022/03/30

		conferenc\$3) WITH (multiple multi plurality) WITH MCU WITH relay\$3 WITH (data image audio)					11:40 AM
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PE2E SEARCH - Search History (Interference)

There are no Interference searches to show.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		16903713
	Filing Date		2020-06-17
	First Named Inventor	Yoshinaga KATO	
	Art Unit	2652	
	Examiner Name	EL-ZOOBI, MARIA	
	Attorney Docket Number	16408US04CON	

U.S.PATENTS								
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear		
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		16903713
	Filing Date		2020-06-17
	First Named Inventor	Yoshinaga KATO	
	Art Unit	2652	
	Examiner Name	EL-ZOOBI, MARIA	
	Attorney Docket Number	16408US04CON	

	1	Blackboard Collaborate Essentials, Blackboard Collaborate 11, June 30, 2011, 22 pages.	☐
If you wish to add additional non-patent literature document citation information please click the Add button			
EXAMINER SIGNATURE			
Examiner Signature			Date Considered
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			
¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.			

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	16903713
	Filing Date	2020-06-17
	First Named Inventor	Yoshinaga KATO
	Art Unit	2652
	Examiner Name	EL-ZOOBI, MARIA
	Attorney Docket Number	16408US04CON

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☒ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☐ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☐ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Derek P. Benke/	Date (YYYY-MM-DD)	2022-04-29
Name/Print	Derek P. Benke	Registration Number	56,944

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
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5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Acknowledgement Receipt	
EFS ID:	45602367
Application Number:	16903713
International Application Number:	
Confirmation Number:	1733
Title of Invention:	TRANSMISSION MANAGEMENT APPARATUS
First Named Inventor/Applicant Name:	Yoshinaga KATO
Customer Number:	154930
Filer:	Derek P. Benke/Chi Park
Filer Authorized By:	Derek P. Benke
Attorney Docket Number:	16408US04CON
Receipt Date:	29-APR-2022
Filing Date:	17-JUN-2020
Time Stamp:	17:07:30
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment		no			
File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Form (SB08)	16408US04CONIDS_signed.pdf	1128483	no	4
			61d094141c3402e1efa8521c36e77153e1d82d38		
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			99978b2d310f46cd75f7aa5c73fcb3b48d5008ae		
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Total Files Size (in bytes):			7243512		
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/903,713	06/17/2020	Yoshinaga KATO	16408US04CON	1733
154930	7590	07/15/2022	EXAMINER	
XSENSUS LLP			EL-ZOOBI, MARIA	
100 Daingerfield Road			ART UNIT	
Suite 402			PAPER NUMBER	
Alexandria, VA 22314			2652	
			NOTIFICATION DATE	
			DELIVERY MODE	
			07/15/2022	
			ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Faith.Baggett@xsensus.com
Sandy.Miles@Xsensus.com
anaquadocketing@Xsensus.com

<i>Applicant-Initiated Interview Summary</i>	Application No. 16/903,713	Applicant(s) KATO et al.		
	Examiner MARIA EL-ZOObI	Art Unit 2652	AIA (First Inventor to File) Status No	Page 1 of 1

All Participants (applicant, applicants representative, PTO personnel)	Title	Type
MARIA EL-ZOObI	Primary Examiner	Telephonic
Derek Benke	Attorney	

Date of Interview: 11 July 2022

Issues Discussed:

Proposed Amendment(s)

Applicant proposed the following amendment to independent claim (wherein the first transmission terminal is configured to display video images from each transmission terminal attending the video communication simultaneously), examiner agrees that the proposed amendment is not in the cited references, however, further search will be performed once the response is filed.

/MARIA EL-ZOObI/ Primary Examiner, Art Unit 2652	7/12/2020
Applicant is reminded that a complete written statement as to the substance of the interview must be made of record in the application file. It is the applicants responsibility to provide the written statement, unless the interview was initiated by the Examiner and the Examiner has indicated that a written summary will be provided. See MPEP 713.04 Please further see: MPEP 713.04 Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews, paragraph (b) 37 CFR § 1.2 Business to be transacted in writing	

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview.

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

DOCKET NO: 16408US04CON

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
YOSHINAGA KATO : EXAMINER: EL-ZOOBI, MARIA
SERIAL NO: 16/903,713 :
FILED: JUNE 17, 2020 : GROUP ART UNIT: 2652
FOR: TRANSMISSION MANAGEMENT :
APPARATUS

AMENDMENT UNDER 37 C.F.R. § 1.111

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

Commissioner:

In response to the Office Action dated April 5, 2022, the following is submitted in connection with the above-identified application.

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A transmission management apparatus for updating attendance states of a plurality of transmission terminals including a first transmission terminal and a second transmission terminal, the transmission management apparatus comprising:

a storage medium configured to store first information including a first identification name and ~~[[an]]~~ a first attendance state associated with the first transmission terminal, and second information including a second identification name and ~~[[an]]~~ a second attendance state associated with the second transmission terminal; ~~and, wherein~~

~~the transmission management apparatus is circuitry~~ configured to:

update the first attendance state associated with the first transmission terminal to a state indicating that the first transmission terminal is attending a video communication, based on attendance request information for video communication received from the first transmission terminal;

update, when the second transmission terminal attends the video communication, the second attendance state associated with the second transmission terminal to a state indicating that the second transmission terminal is attending the video communication;

acquire information including an identification name associated with a transmission terminal with which an attendance state is associated and in which the attendance state indicates that the transmission terminal is attending the video communication, from the storage medium; and

transmit the acquired information to the first transmission terminal, wherein the acquired information is used in order to

display an identification name list of sites including the first transmission terminal and the second transmission terminal which are attending the video communication during the video communication,

wherein the first transmission terminal is configured to display video images from each transmission terminal attending the video communication simultaneously.

2. (Previously Presented) The transmission management apparatus of claim 1, wherein the storage medium stores a terminal management table that contains the first information.

3. (Currently Amended) The transmission management apparatus of claim 1, wherein the storage medium stores a first identifier ~~identifiers~~ for identifying the first transmission terminal and a second identifier for identifying the second transmission terminal ~~terminals~~.

4. (Previously Presented) The transmission management apparatus of claim 1, wherein the identification name associated with a particular transmission terminal of the plurality of transmission terminals is information to be registered or changed in response to a request from the particular transmission terminal.

5. (Previously Presented) The transmission management apparatus of claim 1, wherein other transmission terminals of the plurality of transmission terminals, which are other than the

first transmission terminal and are attending a same conference, transmit or receive at least one of image data and sound data to or from each other via a relaying apparatus.

6. (Previously Presented) The transmission management apparatus of claim 1, wherein each of the plurality of transmission terminals is one of a video conference terminal, a car navigation device, and a cell phone.

7. (Currently Amended) The transmission management apparatus of claim 1, wherein the first identification name ~~[[that]]~~ is stored in the storage medium in association with first ~~is associated with~~ identification information, and the second identification name is stored in the storage medium in association with second identification information ~~transmitted from the plurality of transmission terminals~~.

8. (Currently Amended) The transmission management apparatus of claim 1, wherein a destination list associated with first identification information transmitted from the first transmission terminal is stored in the storage medium, and the destination list registers at least the second transmission terminal as a destination candidate.

9. (Currently Amended) A method comprising:
updating, ~~by a transmission management apparatus~~, attendance states of a plurality of transmission terminals including a first transmission terminal and a second transmission terminal;

storing, in a storage medium, first information including a first identification name and ~~[[an]]~~ a first attendance state associated with the first transmission terminal, and second information including a second identification name and ~~[[an]]~~ a second attendance state associated with the second transmission terminal;

updating, ~~by the transmission management apparatus,~~ the first attendance state associated with the first transmission terminal to a state indicating that the first transmission terminal is attending a video communication, based on attendance request information for video communication received from the first transmission terminal;

updating, ~~by the transmission management apparatus,~~ when the second transmission terminal attends the video communication, the second attendance state associate with the second transmission terminal to a state indicating that the second transmission terminal is attending the video communication;

acquiring, ~~by the transmission management apparatus,~~ information including an identification name associated with a transmission terminal with which an attendance state is associated and in which the attendance state indicates that the transmission terminal is attending the video communication, from the storage medium; ~~[[and]]~~

transmitting, ~~by the transmission management apparatus,~~ the acquired information to the first transmission terminal, wherein the acquired information is used ~~for displaying in order to~~ display an identification name list of sites including the first transmission terminal and the second transmission terminal which are attending the video communication during the video communication; and

displaying, by the first transmission terminal, video images from each transmission terminal attending the video communication simultaneously.

10. (Currently Amended) A system comprising:

a first transmission terminal; and

a management apparatus comprising:

a storage medium configured to store first information including an identification name and ~~[[an]]~~ a first attendance state associated with the first transmission terminal, and second information including an identification name and ~~[[an]]~~ a second attendance state associated with a second transmission terminal~~[[,]]; and~~

~~wherein the management apparatus is~~ circuitry configured to:

update the first attendance state associated with the first transmission terminal to a state indicating that the first transmission terminal is attending a video communication, based on attendance request information for video communication received from the first transmission terminal,

update, when the second transmission terminal attends the video communication, the second attendance state associated with the second transmission terminal to a state indicating that the second transmission terminal is attending the video communication,

acquire information including an identification name associated with a transmission terminal with which an attendance state is associated and in which the attendance state indicates that the transmission terminal is attending the video communication, from the storage medium, and

transmit the acquired information to the first transmission terminal, and

the first transmission terminal is configured to:

receive the acquired information from the management apparatus, and