AO 120 (Rev. 08/10)

TO:	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Delaware on the following

☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
	7/28/2022	Delaware

PLAINTIFF	DEFENDANT
NEC Corporation	Peloton Interactive, Inc.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	8,752,101	6/10/2014	NEC Corporation
2	8,909,809	12/9/2014	NEC Corporation
3	9,769,427	9/19/2017	NEC Corporation
4			
5			

In the above---entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above---entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

Copy 1---Upon initiation of action, mail this copy to Director Copy 3---Upon termination of action, mail this copy to Director
Copy 2---Upon filing document adding patent(s), mail this copy to Director Copy 4---Case file copy

AO 120 (Rev. 08/10)

TO:	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
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☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
	7/28/2022	Delaware

PLAINTIFF	DEFENDANT
NEC Corporation	Our Body Electric, Inc.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	8,752,101	6/10/2014	NEC Corporation
2	8,909,809	12/9/2014	NEC Corporation
3	9,769,427	9/19/2017	NEC Corporation
4			
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In the above---entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
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DECISION/JUDGEMENT

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Copy 2---Upon filing document adding patent(s), mail this copy to Director Copy 4---Case file copy

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.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/129,756	09/19/2017	9769427	J-11-0248	1971

71799 7590 08/30/2017

Mr. Jiro Hashimoto
NEC-IAC
2100 Pennsylvania Ave., NW
SUITE 800
Washington, DC 20037-3213

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment is 168 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Kunihiro Taniguchi, Tokyo, JAPAN;
Kazushige Ishikawa, Tokyo, JAPAN;
Kazuo Asami, Tokyo, JAPAN;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

71799 7590 05/26/2017
Mr. Jiro Hashimoto
2100 Pennsylvania Ave., NW
SUITE 801
Washington, DC 20037-3213

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/129,756	05/17/2011	Kunihiro Taniguchi	J-11-0248	1971

TITLE OF INVENTION: CONTENT DELIVERY SYSTEM

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	08/28/2017

EXAMINER	ART UNIT	CLASS-SUBCLASS
PASCUAL PEGUERO, NATALI	2463	709-219000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE: NEC CORPORATION
(B) RESIDENCE: (CITY and STATE OR COUNTRY): TOKYO, JAPAN

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:
- ☒ Issue Fee
- ☒ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number (EFT) (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ☐ Applicant certifying micro entity status. See 37 CFR 1.29
  NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ☐ Applicant asserting small entity status. See 37 CFR 1.27
  NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ☐ Applicant changing to regular undiscounted fee status.
  NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature / Carl J Pellegrini / Date August 11, 2017
Typed or printed name Carl J Pellegrini Registration No. 40766

Peloton - Ex. 1002, Page 4
IPR2023-01241 (Peloton v. NEC)
PTOL-85 Part B (10-13) Approved for use through 10/31/2013. OMB 0651-0033 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Electronic Patent Application Fee Transmittal

Application Number:	13129756
Filing Date:	17-May-2011
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Filer:	Carl Joseph Pellegrini/Deanna Thomas
Attorney Docket Number:	J-11-0248

Filed as Large Entity

Filing Fees for U.S. National Stage under 35 USC 371

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:				
UTILITY APPL ISSUE FEE	1501	1	960	960

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**960**

Electronic Acknowledgement Receipt

EFS ID:	30065406
Application Number:	13129756
International Application Number:	
Confirmation Number:	1971
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Customer Number:	71799
Filer:	Carl Joseph Pellegrini/Deanna Thomas
Filer Authorized By:	Carl Joseph Pellegrini
Attorney Docket Number:	J-11-0248
Receipt Date:	14-AUG-2017
Filing Date:	17-MAY-2011
Time Stamp:	11:11:24
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	EFT
Payment was successfully received in RAM	$960
RAM confirmation Number	081417INTEFSW11115000
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	Issue Fee Payment (PTO-85B)	J-11-0248_IssueFeePTOL-85.pdf	152650 85b578c50454cbc64adb135ccebb8e82f35aacb1	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30660 8a43d801e7db2055046b247c703a96f746231464	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	183310		

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.

UNITED STATES PATENT AND TRADEMARK OFFICE
COMMISSIONER FOR PATENTS
P.O.BOX 1450
ALEXANDRIA VA 22313-1451

PRESORTED
FIRST-CLASS MAIL
U.S. POSTAGE PAID
POSTEDIGITAL
NNNNN

Mr. Jiro Hashimoto
2100 Pennsylvania Ave., NW
SUITE 801
Washington, DC 20037-3213

Courtesy Reminder for
Application Serial No: 13/129,756

Attorney Docket No: J-11-0248
Customer Number: 71799
Date of Electronic Notification: 05/26/2017

This is a courtesy reminder that new correspondence is available for this application. If you have not done so already, please review the correspondence. The official date of notification of the outgoing correspondence will be indicated on the form PTOL-90 accompanying the correspondence.

An email notification regarding the correspondence was sent to the following email address(es) associated with your customer number:

necipca@necam.com
reiko.sasaki@necam.com
jiro.hashimoto@necam.com

To view your correspondence online or update your email addresses, please visit us anytime at **https://sportal.uspto.gov/secure/myportal/privatepair.** If you have any questions, please email the Electronic Business Center (EBC) at EBC@uspto.gov or call 1-866-217-9197.

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

NOTICE OF ALLOWANCE AND FEE(S) DUE

71799 7590 05/26/2017

Mr. Jiro Hashimoto
2100 Pennsylvania Ave., NW
SUITE 801
Washington, DC 20037-3213

EXAMINER
PASCUAL PEGUERO, NATALI

ART UNIT	PAPER NUMBER
2463	

DATE MAILED: 05/26/2017

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/129,756	05/17/2011	Kunihiro Taniguchi	J-11-0248	1971

TITLE OF INVENTION: CONTENT DELIVERY SYSTEM

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	08/28/2017

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

71799 7590 05/26/2017
Mr. Jiro Hashimoto
2100 Pennsylvania Ave., NW
SUITE 801
Washington, DC 20037-3213

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/129,756	05/17/2011	Kunihiro Taniguchi	J-11-0248	1971

TITLE OF INVENTION: CONTENT DELIVERY SYSTEM

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	08/28/2017

EXAMINER	ART UNIT	CLASS-SUBCLASS
PASCUAL PEGUERO, NATALI	2463	709-219000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:
- ❑ Issue Fee
- ❑ Publication Fee (No small entity discount permitted)
- ❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ❑ A check is enclosed.
- ❑ Payment by credit card. Form PTO-2038 is attached.
- ❑ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ❑ Applicant certifying micro entity status. See 37 CFR 1.29 — NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ❑ Applicant asserting small entity status. See 37 CFR 1.27 — NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ❑ Applicant changing to regular undiscounted fee status. — NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

Peloton - Ex. 1002, Page 11
IPR2023-01241 (Peloton v. NEC)

PTOL-85 Part B (10-13) Approved for use through 10/31/2013. OMB 0651-0033 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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.
13/129,756	05/17/2011	Kunihiro Taniguchi	J-11-0248	1971

71799 7590 05/26/2017

Mr. Jiro Hashimoto
2100 Pennsylvania Ave., NW
SUITE 801
Washington, DC 20037-3213

EXAMINER	
PASCUAL PEGUERO, NATALI	
ART UNIT	PAPER NUMBER
2463	

DATE MAILED: 05/26/2017

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. 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, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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 disclosure of these records is required by the Freedom of Information Act.
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.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
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 inspection 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.

Examiner-Initiated Interview Summary	Application No. 13/129,756	Applicant(s) TANIGUCHI ET AL.		
	Examiner NATALI N. PASCUAL PEGUERO	Art Unit 2463	AIA (First Inventor to File) Status No	Page 1 of 1

All participants (applicant, applicant's representative, PTO personnel):

1. NATALI N. PASCUAL PEGUERO (Examiner); Telephonic
2. Michael Smith (Attorney); Telephonic

Date of Interview: 11 May 2017

Claim(s) discussed: All pending claims

Brief Description of main topic of discussion: To discuss Double Patenting

Issues Discussed:

Double Patenting:
Examiner contacted Applicant's Representative and requested a Terminal Disclaimer to overcome DP regarding U.S. Patent No. 9,288,445 B2 in order to place the application in condition for allowance.

/NATALI N PASCUAL PEGUERO/ Examiner, Art Unit 2463	/MARK RINEHART/ Supervisory Patent Examiner, Art Unit 2463

Applicant recordation instructions: It is not necessary for applicant to provide a separate record 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.

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 applicant's 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

Notice of Allowability	Application No. 13/129,756	Applicant(s) TANIGUCHI ET AL.	
	Examiner NATALI N. PASCUAL PEGUERO	Art Unit 2463	AIA (First Inventor to File) Status No

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

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *14 April 2017*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ 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.
3. ☒ The allowed claim(s) is/are *1,2,4-6,8-19,21 and 24-41 (renumbered as 1-36)*. As a result of the allowed claim(s), 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.
4. ☒ 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)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☒ Interview Summary (PTO-413), Paper No./Mail Date *05/11/2017* .
5. ☐ Examiner's Amendment/Comment
6. ☒ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/NATALI N PASCUAL PEGUERO/ Examiner, Art Unit 2463	/MARK RINEHART/ Supervisory Patent Examiner, Art Unit 2463

DETAILED ACTION

Notice of Pre-AIA or AIA Status

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

Previous Rejections Withdrawn

2. The objections to claims 11-14, 26, 29 and 38 are withdrawn based on applicant's amendment.

Allowable Subject Matters

3. **Claims 1, 2, 4-6, 8-19, 21 and 24-41** are allowed. The following is an examiner's statement of reasons for allowance:

4. **Claims 1, 11, 15, 19, 21, 25-29 and 37-41** are allowed over the prior arts of record because the Examiner found neither prior arts cited in its entirety, nor based on the prior arts found any motivation to combine any of the said prior art references which teach the combined claimed limitations as recited in the claims 1, 11, 15, 19, 21, 25-29 and 37-41. **Claims 2, 4-6, 8-10, 12-14, 16-18, 24 and 30-36** are also allowed since they depend on claims 1, 11, 15 and 29 respectively.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATALI N. PASCUAL PEGUERO whose telephone number is (571)272-4691. The examiner can normally be reached on Monday - Friday 11:30am - 8:00pm EST.

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, MARK H. RINEHART can be reached on (571)272-3632. 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 http://pair-direct.uspto.gov. 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.

/NATALI N PASCUAL PEGUERO/
Examiner, Art Unit 2463

/MARK RINEHART/
Supervisory Patent Examiner, Art Unit 2463

Examiner-Initiated Interview Summary	Application No.	Applicant(s)		
	13/129,756	TANIGUCHI ET AL.		
	Examiner	Art Unit	AIA (First Inventor to File) Status	Page
	NATALI N. PASCUAL PEGUERO	2463	No	1 of 1

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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

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	Art Unit
	NATALI N PASCUAL PEGUERO	2463

CPC- SEARCHED		
Symbol	Date	Examiner
H04L 29/08072, H04L 29/06, H04L 29/0809, H04L 29/08981 and H04L29/08117	2/20/2014	NP

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
709	217,219		

SEARCH NOTES		
Search Notes	Date	Examiner
East Search including keywords,class/subclass,inventor,assignee	5/1/2013	NP
IP.com Patent Search	5/1/2013	NP
Updated Search in EAST	2/20/2014	NP
H04L 29/08072, H04L 29/06, H04L 29/0809, H04L 29/08981 and H04L29/08117 (Text Search only)	2/20/2014	NP
Updated Search in EAST	9/5/2014	NP
Updated Search in EAST	3/23/2015	NP
Updated Search in EAST	9/2/2015	NP
Updated Search in EAST	3/9/2016	NP
Updated Search in EAST	1/8/2017	NP
Consulted Primary Examiner Mang H. Yeung for allowable subject matters	5/1/2017	NP
Updated search in EAST	5/18/2017	NP

INTERFERENCE SEARCH

/NATALI N PASCUAL PEGUERO/ Examiner.Art Unit 2463	

US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
	See Interference search hist printout	5/18/2017	NP

/NATALI N PASCUAL PEGUERO/ Examiner.Art Unit 2463	

UNITED STATES PATENT AND TRADEMARK OFFICE

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United States Patent and Trademark Office
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P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

BIB DATA SHEET

CONFIRMATION NO. 1971

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
13/129,756	05/17/2011 RULE	709	2463	J-11-0248

APPLICANTS

INVENTORS

Kunihiro Taniguchi, Tokyo, JAPAN;
Kazushige Ishikawa, Tokyo, JAPAN;
Kazuo Asami, Tokyo, JAPAN;

**** CONTINUING DATA ***************************

This application is a 371 of PCT/JP2009/006140 11/17/2009

**** FOREIGN APPLICATIONS ***************************

JAPAN 2008294270 11/18/2008

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ****

06/03/2011

Foreign Priority claimed	☑ Yes ☐ No	☐ Met after Allowance	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
35 USC 119(a-d) conditions met	☑ Yes ☐ No		JAPAN	20	36	15
Verified and Acknowledged	/NATALI PASCUAL PEGUERO/ Examiner's Signature	Initials				

ADDRESS

Mr. Jiro Hashimoto
2100 Pennsylvania Ave., NW
SUITE 801
Washington, DC 20037-3213
UNITED STATES

TITLE

CONTENT DELIVERY SYSTEM

FILING FEE RECEIVED		
6036	FEES: Authority has been given in Paper No._____ to charge/credit DEPOSIT ACCOUNT No._____ for following:	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	**Art Unit**
	NATALI N PASCUAL PEGUERO	2463

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

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☒ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/01/2013	02/20/2014	09/05/2014	03/23/2015	09/02/2015	03/09/2016	01/08/2017	05/18/2017	
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	3	✓	✓	✓	-	-	-	-	-	
3	4	✓	✓	✓	✓	✓	✓	✓	=	
4	5	✓	✓	✓	✓	✓	✓	✓	=	
5	6	✓	✓	✓	✓	✓	✓	✓	=	
	7	✓	✓	-	-	-	-	-	-	
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28	34		✓	✓	✓	✓	✓	✓	=	
31	35		✓	✓	✓	✓	✓	✓	=	
29	36		✓	✓	✓	✓	✓	✓	=	

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CLAIM		DATE								
Final	Original	05/01/2013	02/20/2014	09/05/2014	03/23/2015	09/02/2015	03/09/2016	01/08/2017	05/18/2017	
32	37			✓	✓	✓	✓	✓	=	
33	38			✓	✓	✓	✓	✓	=	
34	39			✓	✓	✓	✓	✓	=	
35	40			✓	✓	✓	✓	✓	=	
36	41			✓	✓	✓	✓	✓	=	

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L5	1799	(advertisement) with (playlist)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/05/18 18:23
L6	21409	(reser$5 guarant$6) near2 (bandwidth BW)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/05/18 18:24
L7	0	5 with 6	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/05/18 18:24
L8	23	5 and 6	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/05/18 18:24
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L10	0	8 and 9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/05/18 18:26
L11	29613	((transm$6 send$4) with (content playlist advertisement)) with (connection)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/05/18 18:28
L12	10141	((transm$6 send$4) near2 (content playlist advertisement)) with (connection)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/05/18 18:29
L13	116	6 and 12	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/05/18 18:29
S1	1	"13129756"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 12:02

S2	2	"20110225270"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 12:22
S4	4	"2008022298"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 15:13
S6	1	"12099489"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 15:55
S7	4	"10287835"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 16:29
S8	2	"20030105669"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 16:30
S16	2639	((core near2 IMS) or (core near2 (Internet adj Protocol adj Multimedia adj Subsystem)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:56
S17	1275	@ad< "20081118" and S16	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:57
S18	67	S17 and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:57
S19	60	S18 and (user near2 (device or equipment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:58
S23	20	S19 and "370".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:01
S24	20	S16 and S23	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:02
S25	18	S19 and "709".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:07

S26	1	"13063122"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 21:21
S32	21	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:17
S33	173	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:18
S34	36	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:18
S36	10	("20030105669" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:24
S37	40211	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:26
S38	21	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:28
S39	2	S38 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:28
S40	173	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S41	2	S40 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S42	36	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S43	2	S42 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29

S44	908	(Application near2 server) and (connection near2 control) and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:34
S45	502	@ad< "20081118" and S44	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:35
S46	235	S45 and ((user near2 (device or equipment)) and (storage) and (user near2 information))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:36
S47	19	S46 and 709/219,217.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
S48	5409367	(content delivery system).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
S49	2	S48 and S41	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
S50	702	S44 and (delivery)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:38
S51	44	S50 and 709/219,217.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:38
S52	37	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:40
S53	239	((KAZUO) near2 (ASAMI)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:41
S54	49	((KUNIHIRO) near2 (TANIGUCHI)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:41
S55	41734	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:42

S56	2	S52 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S57	2	S53 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S58	2	S54 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S59	0	S55 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S60	12	("20030105669" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:28
S61	2	S60 and attribute	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:28
S62	74272	(H04L29/08072 H04L29/06 H04L29/0809 H04L29/08981 H04L29/08117).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38
S63	3124	S62 and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38
S64	844	S63 and attribute	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38
S65	1509	"I14" and delivery	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:39
S66	14	S65 and (content near2 selection)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:39
S67	1	@ad< "20081118" and S66	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:40

S68	69263	@ad< "20081118" and S62	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:40
S69	159	S68 and (advertisement and (content near2 selection))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:41
S70	37	S69 and (application near2 server)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:41
S71	1	"13129756"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 13:41
S72	39	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:30
S73	241	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:30
S74	50	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:30
S75	42659	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
S77	2	S72 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
S78	2	S73 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
S79	2	S74 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
S80	0	S75 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31

S81	12	("20030105669" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:34
S82	40	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:22
S83	243	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:22
S84	52	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:23
S85	43416	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:23
S86	2	S82 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:23
S87	2	S83 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:23
S89	2	S84 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:24
S90	0	S85 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:24
S91	40	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:12
S92	52	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:12
S93	243	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:12

S94	44046	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:13
S95	2	S91 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:13
S96	2	S92 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:13
S97	2	S93 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:13
S98	16	("8458184" | "20030105669" | "20070186003" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:14
S99	3	S98 and (play$1list)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:14
S100	5042	(advertis$6) with (list or play$1list) with (display$6 output$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:15
S101	548	(advertis$6) with (list or play$1list) with (display$6 output$6) with (user near6 select$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:16
S102	268	@ad< "20081118" and S101	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:16
S103	102	(advertis$6) with (list or play$1list) with (display$6 output$6) with (user near6 select$6) with (broadcas$6 transmit$6 send$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:18
S104	38	@ad< "20081118" and S103	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:19
S105	1	"13129756"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2015/09/02 22:27

			IBM_TDB			
S106	5583	(G06F15/16).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:27
S108	102	S103 and S100	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:28
S109	13	"2010010716"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/03 11:54
S110	5	"20100107162"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/03 11:55
S111	53	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:28
S112	40	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:28
S113	243	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:28
S114	44870	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:29
S115	2	S111 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:29
S116	2	S112 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:29
S117	2	S113 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:29
S118	0	S114 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2016/03/09 22:30

			IBM_TDB			
S119	3	"20080256216"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:30
S120	2	"8458184".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:31
S121	31	(guarant$5 near2 bandwidth) with (transmi$5) near2 (multimedia content play$1list)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/09 00:00
S122	31	(guarant$5 near2 bandwidth) with ((transmi$5) near2 (multimedia content play$1list))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/09 00:00
S123	41	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/09 00:01
S124	245	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/09 00:01
S125	57	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/09 00:01
S126	45978	((NEC) near2 (CORPORATION)).AS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/09 00:02
S127	2	S123 and ((application near2 server) and (sub near2 content) and (play$1list near2 information)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/09 00:03
S128	2	S124 and ((application near2 server) and (sub near2 content) and (play$1list near2 information)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/09 00:03
S129	2	S125 and ((application near2 server) and (sub near2 content) and (play$1list near2 information)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/09 00:03
S130	0	S126 and ((application near2 server) and (sub near2 content) and (play$1list near2 information)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2017/01/09 00:03

			IBM_TDB			
S131	41	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/05/01 19:55
S132	245	((KAZUO) near2 (ASAMI)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/05/01 20:00
S133	57	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/05/01 20:00
S134	46441	((NEC) near2 (CORPORATION)).AS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/05/01 21:19
S135	41	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/05/01 21:30
S136	2	S135 and ((application near2 server) and (sub near2 content) and (play$1list near2 information)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/05/01 21:30
S137	245	((KAZUO) near2 (ASAMI)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/05/01 21:30
S138	2	S137 and ((application near2 server) and (sub near2 content) and (play$1list near2 information)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/05/01 21:30
S139	57	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/05/01 21:30
S140	2	S139 and ((application near2 server) and (sub near2 content) and (play$1list near2 information)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/05/01 21:30
S141	0	S134 and ((application near2 server) and (sub near2 content) and (play$1list near2 information)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/05/01 21:30
S142	2	"13063122"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2017/05/01 21:50

			IBM_TDB			
S143	2	"13063122"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/05/02 14:45

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	30	((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT	OR	ON	2017/05/18 17:15
L2	2	((application near2 server) and (sub near2 content) and ((play$1list) near2 (information))).clm.	US-PGPUB; USPAT	OR	ON	2017/05/18 17:16
L3	26801	(H04L29/08072 H04L29/06 H04L29/0809 H04L29/08981 H04L29/08117).cpc.	US-PGPUB; USPAT	OR	ON	2017/05/18 17:17
L4	0	L3 and 2	US-PGPUB; USPAT	OR	ON	2017/05/18 17:17
S144	26778	(H04L29/08072 H04L29/06 H04L29/0809 H04L29/08981 H04L29/08117).cpc.	US-PGPUB; USPAT	OR	ON	2017/05/02 15:35

5/ 18/ 2017 7:00:35 PM
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Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	**Art Unit**
	NATALI N PASCUAL PEGUERO	2463

CPC						
Symbol					**Type**	**Version**
H04N		7	/	165	F	2013-01-01
G06Q		30	/	02	I	2013-01-01
H04N		21	/	25808	I	2013-01-01
H04N		21	/	2668	I	2013-01-01
H04N		21	/	482	I	2013-01-01
H04N		21	/	812	I	2013-01-01
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CPC Combination Sets							
Symbol					**Type**	**Set**	**Ranking**	**Version**
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			/					

/NATALI N PASCUAL PEGUERO/ Examiner.Art Unit 2463	5/18/2017	**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	36	
/MARK RINEHART/ Supervisory Patent Examiner, Art Unit 2463		O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	**Art Unit**
	NATALI N PASCUAL PEGUERO	2463

US ORIGINAL CLASSIFICATION		INTERNATIONAL CLASSIFICATION										
CLASS	SUBCLASS	CLAIMED					NON-CLAIMED					
		H	0	4	N	7 / 16 (2011.01.01)						
CROSS REFERENCE(S)												
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)											

/NATALI N PASCUAL PEGUERO/ Examiner.Art Unit 2463	5/18/2017	**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	36	
/MARK RINEHART/ Supervisory Patent Examiner, Art Unit 2463		O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	**Art Unit**
	NATALI N PASCUAL PEGUERO	2463

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☒ T.D. ☐ R.1.47

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
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15	16	27	32												

/NATALI N PASCUAL PEGUERO/ Examiner.Art Unit 2463	5/18/2017	**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	36	
/MARK RINEHART/ Supervisory Patent Examiner, Art Unit 2463		O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

Application Number	Application/Control No.	Applicant(s)/Patent under Reexamination	
	13/129,756	TANIGUCHI ET AL.	

Document Code - DISQ	Internal Document – DO NOT MAIL

TERMINAL DISCLAIMER	☒ APPROVED	☐ DISAPPROVED
Date Filed : 11 May, 2017	This patent is subject to a Terminal Disclaimer	

Approved/Disapproved by:

PAMELA YOUNG

Technology Center: PLRC

Telephone: _____

U.S. Patent and Trademark Office

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TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING REJECTION OVER A "PRIOR" PATENT	Docket Number (Optional) 2207946.00141US1

In re Application of: Kunihiro TANIGUCHI

Application No.: 13/129,756-Conf. #1971

Filed: May 17, 2011

For: CONTENT DELIVERY SYSTEM

The owner*, NEC Corporation, of 100 percent interest in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of **prior patent** No. 9,288,445 as the term of said **prior patent** is presently shortened by any terminal disclaimer. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the **prior patent** are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the owner does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term of the **prior patent**, "as the term of said **prior patent** is presently shortened by any terminal disclaimer," in the event that said **prior patent** later:

expires for failure to pay a maintenance fee;
is held unenforceable;
is found invalid by a court of competent jurisdiction;
is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321;
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Check either box 1 or 2 below, if appropriate.

1. [x] For submissions on behalf of a business/organization (e.g., corporation, partnership, university, government agency, etc.), the undersigned is empowered to act on behalf of the business/organization.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

2. [ ] The undersigned is an attorney or agent of record. Reg. No. 71,190

/Michael Smith/ — Signature
May 11, 2017 — Date
Michael H. Smith — Typed or printed name
(202) 663-6000 — Telephone Number

[x] Terminal disclaimer fee under 37 CFR 1.20(d) is included.

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.

*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner).
Form PTO/SB/96 may be used for making this certification. See MPEP § 324.

Electronic Patent Application Fee Transmittal

Application Number:	13129756
Filing Date:	17-May-2011
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Filer:	Michael Hal Smith/Lisa Morris
Attorney Docket Number:	J-11-0248

Filed as Large Entity

Filing Fees for U.S. National Stage under 35 USC 371

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($)
Miscellaneous:				
STATUTORY OR TERMINAL DISCLAIMER	1814	1	160	160
		Total in USD ($)		**160**

Electronic Acknowledgement Receipt

EFS ID:	29181181
Application Number:	13129756
International Application Number:	
Confirmation Number:	1971
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Customer Number:	71799
Filer:	Michael Hal Smith/Lisa Morris
Filer Authorized By:	Michael Hal Smith
Attorney Docket Number:	J-11-0248
Receipt Date:	11-MAY-2017
Filing Date:	17-MAY-2011
Time Stamp:	15:54:32
Application Type:	U.S. National Stage under 35 USC 371

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Payment Type	CARD
Payment was successfully received in RAM	$160
RAM confirmation Number	051217INTEFSW15580900
Deposit Account	080219
Authorized User	Lisa Morris

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

37 CFR 1.17 (Patent application and reexamination processing fees)

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

37 CFR 1.492 (National application filing, search, and examination fees)

37 CFR 1.492(a) (Basic national fee only)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Terminal Disclaimer Filed	2207946_00141US1_Terminal_Disclaimer.PDF	159065 bd88c190f9682221e856c4a444dcf3316ea55aa2	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30394 f656b7227342a9592c8bbd95a16ff79def429d49	no	2
Warnings:					
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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.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/129,756	05/17/2011	Kunihiro Taniguchi	J-11-0248	1971

71799 7590 04/14/2017

Mr. Jiro Hashimoto
2100 Pennsylvania Ave., NW
SUITE 801
Washington, DC 20037-3213

EXAMINER
PASCUAL PEGUERO, NATALI

ART UNIT	PAPER NUMBER
2463	

NOTIFICATION DATE	DELIVERY MODE
04/14/2017	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):

necipca@necam.com
jiro.hashimoto@necam.com
reiko.sasaki@necam.com

Applicant-Initiated Interview Summary	Application No. 13/129,756	Applicant(s) TANIGUCHI ET AL.		
	Examiner NATALI N. PASCUAL PEGUERO	Art Unit 2463	AIA (First Inventor to File) Status No	Page 1 of 2

All participants (applicant, applicant's representative, PTO personnel):

1. NATALI N. PASCUAL PEGUERO (Examiner); Telephonic
2. Mang Yeung (Primary Examiner); Telephonic
3. Michael H. Smith (Attorney); Telephonic

Date of Interview: 06 April 2017

Claim(s) discussed: 1

Identification of prior art discussed: AARTS (Pub # US 2008/0256216 A1) in view of Hinderks (Pub # US 2001/0025377 A1) and further in view of Dorogusker et al. (U.S. Patent #8,458,184 B2)

Brief Description of main topic of discussion: Applicant's Representative briefly discussed the invention, and the differences between the claimed subject matter and the cited reference's invention. Applicant's Representative indicated that the process of establishing a connection and transmitting play-list information are performed together at the same time.

Issues Discussed:

Proposed Amendments:
Examiner advises Applicant's Representative to amend the claims by converting all the claimed steps, that are triggered by the "IF statements" (e.g.: "wherein the first transmitter is configured to, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establish the connection, transmit the play-list information....") into required steps. Examiner suggested to modify the term "when" by "simultaneously" or "at the same time" in order to capture that the process of establishing a connection and transmitting play-list information are performed together at the same time. Examiner will be waiting for the official amendments in order to update search/consideration. No agreement was reached.

Attachment(s): Agenda

/MANG YEUNG/ Primary Examiner, Art Unit 2463	/NATALI N PASCUAL PEGUERO/ Examiner, Art Unit 2463

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 time limit 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.

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 applicant's 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

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IPR2023-01241 (Peloton v. NEC)

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Date April 5, 2017

To Examiner Pascual Fax 571 273-4691 Tel

From Michael H. Smith Pages 2 (including cover)

Re Agenda for Thursday 4/6/17 interview at 1 pm ET (13/129,756; Docket No. 2207946-00141)

Agenda attached

This facsimile transmission is confidential and may be privileged. If you are not the intended recipient, please immediately call the sender or, if the sender is not available, call +1 202 663 6712 and destroy all copies of this transmission. If the transmission is incomplete or illegible, please call the sender or, if the sender is not available, call +1 202 663 6712. Thank you.

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IPR2023-01241 (Peloton v. NEC)

Agenda for Thursday 4/6/17 telephone interview at 1 pm ET
(13/129,756; Docket No. 2207946-00141)

1. The rejections in the office action dated January 17, 2017

2. The applied references

3. The pending claims

4. Differences between the claims and the applied references

PAGE 2/2 * RCVD AT 4/5/2017 4:30:02 PM [Eastern Daylight Time] * SVR:W-PTOFAX-002/33 * DNIS:2734691 * CSID:2026636363 * DURATION (mm-ss):00-34

Peloton - Ex. 1002, Page 49
IPR2023-01241 (Peloton v. NEC)

Docket No.: 2207946.00141US1
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Kunihiro Taniguchi	Confirmation No.:	1971
Application No.:	13/129,756	Art Unit:	2463
Filed:	May 17, 2011	Examiner:	N. Pascual Peguero
Title:	CONTENT DELIVERY SYSTEM		

AMENDMENT IN RESPONSE TO NON-FINAL OFFICE ACTION UNDER 37 C.F.R. § 1.111

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

INTRODUCTORY COMMENTS

In response to the Office Action dated January 17, 2017, please amend the above-identified U.S. patent 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 23 of this paper.

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A content delivery system comprising an application server system and one or more connection control servers,

the one or more connection control servers being configured to receive equipment specification information transmitted by a user equipment and establish a connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a memory for storing sub content data representing sub content and main content data representing main content;

a first receiver for receiving a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

a processor for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content; and

a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data via the one or more connection control servers to the user equipment which has transmitted the content delivery request, wherein the first transmitter is configured to, ~~when~~ at a same time that the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a second receiver for receiving main content data and sub content data transmitted by the application server system and output, based on the received main content data and sub content data, viewing content in which sub content represented by the sub

content data is inserted in main content represented by the main content data.

2. (Previously Presented) The content delivery system according to claim 1, wherein:

the user equipment comprises:

a third receiver for receiving the selected sub content specification information transmitted by the application server system; and

a second transmitter for transmitting, to the application server system, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the one or more connection control servers, and

the application server system comprises a fourth receiver for receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by the main content identification information contained in the received main content viewing request to the user equipment, and for receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by the selected sub content specification information contained in the received sub content viewing request to the user equipment.

3. (Canceled)

4. (Previously Presented) The content delivery system according to claim 1, wherein:

the third receiver is configured to receive the play-list information transmitted by the application server system; and

the second transmitter is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information.

5. (Previously Presented) The content delivery system according to claim 1, wherein:

the memory is configured to store the sub content data in association with attribute information representing an attribute of sub content represented by the sub content data;

the selection information contains user basic information that is information for specifying the attribute information and is information associated with user identification information for identifying a user of the user equipment; and

the processor is configured to select sub content data stored in association with the attribute information specified by the user basic information associated with the user identification information for identifying the user of the user equipment which has transmitted the content delivery request.

6. (Previously Presented) The content delivery system according to claim 1, wherein:

the memory is configured to store the sub content data in association with attribute information representing an attribute of the sub content represented by the sub content data;

the selection information contains content basic information that is information for specifying the attribute information and is information associated with the main content identification information for identifying the main content; and

the processor is configured to select sub content data stored in association with the attribute information specified by the content basic information associated with the main content identification information contained in the received content delivery request.

7. (Canceled)

8. (Previously Presented) The content delivery system according to claim 1, wherein

the one or more connection control servers is configured to establish the connection by exchanging a predetermined connection establishment message with each of the user equipment and the application server system; and

the first transmitter is configured to transmit the selected sub content specification information to the user equipment via the one or more connection control servers by incorporating the selected sub content specification information in the connection establishment message.

9. (Previously Presented) The content delivery system according to claim 1, wherein:

the application server system comprises a service control server and a media server; and

the service control server comprises the memory for storing sub content data, the first receiver for receiving the content delivery request, and the first transmitter for transmitting the selected sub content specification information.

10. (Previously Presented) The content delivery system according to claim 1, wherein:

the application server system comprises a service control server and a media server;

the service control server comprises the memory for storing sub content data;

the media server comprises the memory, the processor, and the first transmitter;

the service control server further comprises a third transmitter for transmitting the selection information to the media server via the one or more connection control servers;

the media server further comprises a fifth receiver for receiving the selection information transmitted by the service control server; and

the processor is configured to select the sub content data based on the received selection information.

11. (Currently Amended) A content delivery system comprising an application server system and one or more connection control servers,

the one or more connection control servers comprising a sixth receiver for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a ~~forth~~ fourth transmitter for transmitting content data representing content to the user equipment with which connection is established by the sixth receiver;

a controller for controlling a service provided by the ~~forth~~ fourth transmitter; and

a second memory for storing profile information of a user of the user equipment,

the ~~forth~~ fourth transmitter comprising a memory for storing sub content data representing sub content and main content data representing main content,

the controller comprising:

a first receiver for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the sixth receiver; and

an processor for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content and preliminarily stored by the user profile server functions part, the controller or the one or more connection control servers; and

a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data via the sixth receiver to the user equipment which has transmitted the content delivery request, wherein the first transmitter is configured to, ~~when~~ at a same time that the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the sixth receiver to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

12. (Currently Amended) The content delivery system according to claim 11, wherein:

the user equipment comprises:

a third receiver for receiving the selected sub content specification information transmitted by the controller; and

a second transmitter for transmitting, to the ~~forth~~ fourth transmitter, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information, when connection with the ~~forth~~ fourth transmitter is established by the sixth receiver, and

the ~~forth~~ fourth transmitter comprises a fourth receiver for receiving the main content viewing request transmitted by the user equipment and transmitting to the user equipment main content data identified by the main content identification information contained in the received main content viewing request, and for receiving the sub content viewing request transmitted by the user equipment and transmitting to the user equipment sub content data specified by the selected sub content specification information contained in the received sub content viewing request.

13. (Currently Amended) The content delivery system according to claim 11, wherein the user equipment comprises ~~a second~~ a second receiver for receiving main content data and sub content data transmitted by the ~~forth~~ fourth transmitter, and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

14. (Currently Amended) The content delivery system according to claim 11, wherein

the third receiver is configured to receive the play-list information transmitted by the controller; and

the second transmitter is configured to transmit the main content viewing request and the sub content viewing request to the ~~forth~~ fourth transmitter, based on the received play-list information.

15. (Currently Amended) A content delivery method comprising:

receiving equipment specification information transmitted by user equipment and establishing connection between an application server system and the user equipment based on the received equipment specification information, by one or more connection control servers;

receiving a content delivery request containing main content identification information for identifying main content and transmitted by the user equipment, by the application server system;

selecting sub content data stored in a storing device for storing sub content data representing sub content and main content data representing main content, based on selection information containing attribute information representing an attribute of sub content;

transmitting selected sub content specification information specifying the selected sub content data via the one or more connection control servers to the user equipment which has transmitted the content delivery request, by the application server system; and

~~when~~ at a same time that the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmitting the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output, by the application server system,

wherein the user equipment comprises a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

16. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the selected sub content specification information transmitted by the application server system, by the user equipment;

transmitting, to the application server system, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information, by the user equipment, when connection between the user equipment and the application server system is established by the one or more connection control servers; and

receiving the main content viewing request transmitted by the user equipment and

transmitting main content data identified by main content identification information contained in the received main content viewing request to the user equipment, and receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by selected sub content specification information contained in the received sub content viewing request to the user equipment, by the application server system.

17. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the main content data and the sub content data transmitted by the application server system, and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data, by the user equipment.

18. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the play-list information transmitted by the application server system, by the user equipment; and

transmitting the main content viewing request and the sub content viewing request to the application server system based on the received play-list information, by the user equipment.

19. (Currently Amended) A service control server comprising:

a first receiver for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via a one or more connection control servers establishing connection between a media server and the user equipment;

an processor for selecting sub content data preliminarily stored in a storing device, based on selection information containing attribute information representing an attribute of sub content; and

a first transmitter for transmitting selected sub content specification information specifying the selected sub content data via the one or more connection control servers to the user equipment which has transmitted the content delivery request, wherein

the first transmitter is configured to, ~~when~~ at a same time that the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting

content data as a process for establishing the connection, transmit the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

20. (Canceled)

21. (Currently Amended) A user equipment comprising:

a third receiver for receiving selected sub content specification information selected based on selection information containing attribute information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application server system, via a one or more connection control servers establishing connection between the application server system and the user equipment, wherein the third receiver is configured to, ~~when~~ at a same time that the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, receive the play-list information transmitted by the application server system, via the one or more connection control servers to the user equipment which has transmitted the content delivery request, wherein the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification

information and the sub content specified by the selected sub content specification information are output;

a second transmitter for transmitting, to the application server system, a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the one or more connection control servers, wherein the second transmitter is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information; and

a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

22. (Canceled)

23. (Canceled)

24. (Previously Presented) The content delivery system according to claim 1, wherein the sub content is advertisement content.

25. (Currently Amended) A content delivery system comprising an application server system and one or more connection control servers,

the one or more connection control servers being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information,

the application server system comprising:

a memory for storing sub content data representing sub content and main content

data representing main content;

a first receiver for receiving, a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

a processor for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content; and

a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data via the one or more connection control servers to the user equipment which has transmitted the content delivery request, wherein the first transmitter is configured to, ~~when~~ at a same time that the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and ~~is~~ the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

26. (Currently Amended) A content delivery system comprising an application server system and one or more connection control servers,

the one or more connection control servers comprising a sixth receiver for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a ~~forth~~ fourth transmitter for transmitting content data representing content to the user equipment with which the connection is established by the sixth receiver;

a controller for controlling a service provided by the ~~forth~~ fourth transmitter; and

a second memory for storing profile information of a user of the user equipment,

the ~~forth~~ fourth transmitter comprising a memory for storing sub content data representing sub content and main content data representing main content,

the controller comprising:

a first receiver for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the sixth receiver; and

a processor for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content and preliminarily stored by the user profile server functions part, the controller or the one or more connection control servers; and

a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data, via the sixth receiver to the user equipment which has transmitted the content delivery request, wherein the first transmitter is configured to, ~~when~~ at a same time that the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the sixth receiver to the user equipment which has transmitted the content delivery request, play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises ~~a second~~ a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented

by the sub content data is inserted in main content represented by the main content data.

27. (Currently Amended) A service control server comprising:

a first receiver for receiving a content delivery request containing main content identification information for identifying main content and transmitted by user equipment, via a one or more connection control servers establishing connection between a media server and the user equipment;

a processor for selecting sub content data preliminarily stored in a storing device based on selection information containing attribute information representing an attribute of sub content; and

a first transmitter for transmitting selected sub content specification information specifying the selected sub content data, via the one or more connection control servers to the user equipment which has transmitted the content delivery request, wherein the first transmitter is configured to, ~~when~~ at a same time that the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

28. (Currently Amended) A user equipment comprising:

a third receiver for receiving selected sub content specification information selected based on selection information containing attribute information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application

server system, via one or more connection control servers establishing connection between the application server system and the user equipment, wherein the third receiver is configured to, ~~when~~ at a same time that the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, receive the play-list information transmitted by the application server system, via the one or more connection control servers to the user equipment which has transmitted the content delivery request, wherein the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output;

a second transmitter for transmitting, to the application server system, a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information, when connection with the application server system is established by the one or more connection control servers, wherein the a second transmitter is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information; and

a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

29. (Currently Amended) A server comprising:

a memory; and

one or more processors, wherein the one or more processors are configured to:

store a plurality of sub content data and a plurality of main content data, wherein each of the plurality of sub content data is associated with one or more sub content attributes;

receive a content delivery request from a user device, wherein the content delivery request identifies first main content data of the plurality of main content data;

select at least first sub content data and second sub content data from the plurality of sub content data based on the first sub content data and the second sub content data being associated with at least a particular attribute of the sub content attributes;

transmit a first choice option corresponding to the first sub content data and a second choice option corresponding to the second sub content data to the user device; and

transmit play-list information to the user device via a connection established by one or more connection control servers ~~when~~ at a same time that the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process to establish a connection, wherein the play-list information identifies the main content, the first sub content data, the second sub content data, and a sequence in which the main content, the first sub content data, the second sub content data are to be output,

wherein the user device comprises ~~a second~~ a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

30. (Previously Presented) The server according to claim 29, wherein the one or more processors are further configured to:

receive a sub content viewing request from the user device, wherein the sub content viewing request contains a selected choice corresponding to either the first choice option or the second choice option;

transmit the first sub content data to the user device as selected sub content data if the selected choice corresponds to the first choice option;

transmit the second sub content data to the user device as the selected sub content data if the selected choice corresponds to the second choice option; and

transmit the first main content data identified by the content delivery request to the user device.

31. (Previously Presented) The server according to claim 30, wherein a user inputs a selection command to the user device to select the first choice option or the second choice option as the selected choice.

32. (Previously Presented) The server according to claim 30, wherein one or more processors are further configured to:

transmit the first main content data and the selected sub content data to the user device for viewing on the user device.

33. (Previously Presented) The server according to claim 29, wherein the content delivery request from the user device contains user information about a user of the user device, and

wherein the one or more processors are further configured to select the first sub content data and the second sub content data when the particular attribute corresponds to the user information.

34. (Previously Presented) The server according to claim 30, wherein the content delivery request from the user device contains user information about a user of the user device, and

wherein the one or more processors are further configured to select the first sub content data and the second sub content data when the particular attribute corresponds to the user information.

35. (Previously Presented) The server according to claim 29, wherein the one or more processors are further configured to:

associate each of the plurality of main content data with one or more main content attributes;

select the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content.

36. (Previously Presented) The server according to claim 30, wherein the one or more processors are further configured to:

associate each of the plurality of main content data with one or more main content attributes;

select the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content.

37. (Currently Amended) A content delivery system comprising an application server system and one or more connection control servers,

the one or more connection control servers being configured to receive user identification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received user identification information,

the application server system comprising:

a first receiver for receiving a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content, via the one or more connection control servers;

a processor for selecting the sub content data based on user basic information or the main content identification information, the user basic information being associated with the user identification information for identifying a user of the user equipment having transmitted the content delivery request, and the main content identification information being contained by the content delivery request; and

a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data via the one or more connection control servers to the user equipment which has transmitted the content delivery request, wherein the first transmitter is configured to, ~~when~~ at a same time that the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

38. (Currently Amended) A content delivery system comprising an application server system and one or more connection control servers,

the one or more connection control servers comprising a sixth receiver for receiving user identification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received user identification information,

the application server system comprising:

a ~~forth~~ fourth transmitter for transmitting content data representing content to the user equipment with which connection is established by the sixth receiver;

a controller for controlling a service provided by the ~~forth~~ fourth transmitter; and

a second memory for storing profile information of a user of the user equipment, and

the controller comprising:

a first receiver for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the sixth receiver; and

a processor for selecting sub content data based on user basic information or the main content identification information, the user basic information being associated with the user identification information for identifying a user of the user equipment having transmitted the content delivery request, and the main content identification information being contained by the content delivery request; and

a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data via the sixth receiver to the user equipment which has transmitted the content delivery request, wherein the first transmitter is configured to, ~~when~~ at a same time that the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the sixth receiver to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected

sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

39. (Currently Amended) A content delivery method comprising:

receiving user identification information transmitted by user equipment and establishing connection between an application server system and the user equipment based on the received user identification information, by one or more connection control servers;

receiving a content delivery request containing main content identification information for identifying main content and transmitted by the user equipment, via the one or more connection control servers, by the application server system;

selecting sub content data representing sub content based on user basic information or the main content identification information, the user basic information being associated with the user identification information for identifying a user of the user equipment having transmitted the content delivery request, and the main content identification information being contained by the content delivery request; and

~~when~~ at a same time that the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmitting the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and selected sub content specification information specifying the selected sub content data, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output, by the application server system.

40. (Currently Amended) A non-transitory computer-readable medium storing a program comprising instructions for causing a service control server to realize:

a first receiver for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via one or more connection control servers establishing connection between a media server and the user equipment;

a processor for selecting sub content data based on content basic information associated with the main content identification information contained by the content delivery request; and

a first transmitter for transmitting selected sub content specification information specifying the selected sub content data via the one or more connection control servers to the user equipment which has transmitted the content delivery request, wherein the first transmitter for, ~~when~~ at a same time that the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmitting the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

41. (Currently Amended) A service control server comprising:

a first receiver for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via one or more connection control servers establishing connection between a media server and the user equipment;

a processor for selecting sub content data based on content basic information associated with the main content identification information contained by the content delivery request; and

a first transmitter for transmitting selected sub content specification information specifying the selected sub content data via the one or more connection control servers to the user equipment which has transmitted the content delivery request, wherein the first transmitter is configured to,

~~when~~ at a same time that the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

REMARKS

Claims 1, 2, 4-6, 8-19, 21 and 24-41 have been examined and rejected under 35 U.S.C. 103. Applicant respectfully submits the claims are patentable.

I. Examiner interview

The undersigned thanks Examiner Pascual and Examiner Yeung for the courtesies extended during the telephonic interview conducted on April 6, 2017, during which agreement was reached on the amendments herein appearing to overcome the rejection.

II. Claim objections

Claims 11-14, 26, 29, and 38 have been objected to for informalities. Applicant submits the amendments overcome the objections.

III. Claim Rejections – 35 USC § 103

Claims 1, 2, 4-6, 8-19, 21 and 24-41 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over AARTS (Pub# US 2008/0256216 Al) in view of Hinderks (Pub# US 2001/0025377 Al), and further in view of Dorogusker et al. (U.S. Patent# 8,458,184 B2 hereinafter Dorogusker). Applicant respectfully disagrees.

a. Claim 1

Applicant submits that AARTS, Hinderks, and Dorogusker, alone or in combination, do not disclose all of the features of claim 1. For example, claim 1 states an application server system comprises a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data via the one or more connection control servers to the user equipment which has transmitted the content delivery request. The first transmitter is configured to configured to, ***at a same time that the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process***

for establishing the connection, transmit the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output. In other words, claim 1 states that the first transmitter configured to ***transmit play-list information at a same time that the one or more connection control servers executes a process for establishing the connection.***

The Examiner acknowledges that AARTS does not disclose this limitation. (Office Action at 6). Nor does Hinderks or Dorogusker cure the deficient teachings of AARTS.

Hinderks discloses an overlay network that provides dedicated, guaranteed bandwidth for the transmission of multimedia data through satellite. (Hinderks at [0099].) Hinderks fails to disclose or even suggest ***transmitting play-list information at a same time that the one or more connection control servers executes a process for establishing the connection***.

Dorogusker merely describes automatically transmitting a tag after PMD is connected. (Dorogusker at 20:48-58.) In other words, according to Dorogusker, a tag is transmitted ***after execution of a connection process***, but ***a tag is not transmitted at the same time with connection***. (*See id.*) Dorogusker fails to disclose or even suggest a first transmitter is configured to ***transmit play-list information at the same time that the one or more connection control servers executes a process for establishing the connection***. Thus, in contrast to Dorogusker, in a non-limiting exemplary embodiment, the present system can perform the process of establishing a connection and transmitting play-list information together in order to deliver the playlist information to the user immediately when the connection is established, thereby improving the user experience.

Accordingly, Applicants submit that claim 1 is patentable for at least the reasons presented above.

b. Claims 2, 4-6, 8-10, and 24

Since claims 2, 4-6, 8-10, and 24 depend on claim 1, they are patentable at least based on their dependency.

c. Claims 11, 15, 19, 21, 25-29, and 37-41

Claims 11, 15, 19, 21, 25-29, and 37-41 contain features that are similar or analogous to those discussed in conjunction with claim 1, and therefore are patentable for at least similar or analogous reasons.

d. Claims 12-14, 16-18 and 30-36

Since claims 12-14, 16-18 and 30-36 depend on claims 11, 15 and 29, they are patentable at least based on their dependency.

IV. Conclusion

Applicant believes the pending application is in condition for allowance.

In the event the U.S. Patent and Trademark Office determines that an extension is required, applicant petitions for any required relief including extensions of time and authorizes the

Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 08-0219 referencing docket no. 2207946.00141US1.

Respectfully submitted,

Dated: April 14, 2017

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Electronic Acknowledgement Receipt

EFS ID:	28929624
Application Number:	13129756
International Application Number:	
Confirmation Number:	1971
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Customer Number:	71799
Filer:	Michael Hal Smith/Lisa Morris
Filer Authorized By:	Michael Hal Smith
Attorney Docket Number:	J-11-0248
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Application Type:	U.S. National Stage under 35 USC 371

Payment information:

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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		2207946_00141US1_Amendment_in_Response_to_Non-Final_Office_Action.PDF	230776 d9ee6b85a8a948788903a806884b245352 1e7e55	yes	26

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	22
	Applicant Arguments/Remarks Made in an Amendment	23	26
Warnings:			
Information:			
	Total Files Size (in bytes):	230776	

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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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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/129,756	Filing Date 05/17/2011	☐ To be Mailed

ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) 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), (i), 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 $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ 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

AMENDMENT	04/14/2017	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 34	Minus	** 41	= 0	X $80 =	0
	Independent (37 CFR 1.16(h))	* 13	Minus	***15	= 0	X $420 =	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

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
	☐ 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.
** 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 number found in the appropriate box in column 1.

LIE
LINDA A. WISE

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Mr. Jiro Hashimoto
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Courtesy Reminder for
Application Serial No: 13/129,756

Attorney Docket No: J-11-0248
Customer Number: 71799
Date of Electronic Notification: 01/17/2017

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/129,756	05/17/2011	Kunihiro Taniguchi	J-11-0248	1971

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EXAMINER
PASCUAL PEGUERO, NATALI

ART UNIT	PAPER NUMBER
2463	

NOTIFICATION DATE	DELIVERY MODE
01/17/2017	ELECTRONIC

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

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jiro.hashimoto@necam.com

Office Action Summary	Application No. 13/129,756	Applicant(s) TANIGUCHI ET AL.	
	Examiner NATALI N. PASCUAL PEGUERO	Art Unit 2463	AIA (First Inventor to File) Status No

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- 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 *09 December 2016*.

☐ 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) *1,2,4-6,8-19,21 and 24-41* 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) *1,2,4-6,8-19,21 and 24-41* 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 *17 May 2011* 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: _____.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

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

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on **December 09, 2016** has been entered.

Response to Arguments

3. Applicant's arguments, see Remarks, filed on **12/09/2016**, with respect to the claims have been considered but are not persuasive because the arguments do not apply to the references as used in the current rejection. The outstanding rejections of **Claims 1, 2, 4-6, 8-19, 21 and 24-41** under 35 U.S.C 103(a) are withdrawn in light of Applicant's amendment to **Claims 1, 11, 15, 19, 21, 25-29 and 37-41**. However, upon further consideration, a new ground(s) of rejection is made to address Applicant's arguments over AARTS (Pub # US 2008/0256216 A1) in view of Hinderks (Pub # US 2001/0025377 A1), and further in view of Dorogusker et al. (U.S. Patent # 8,458,184 B2).

Claim Objections

4. **Claims 11-14, 26 and 38** are objected to because of the following informalities: Claim 11 (lines 8, 10 and 11), Claim 12 (lines 4, 7 and 8), Claim 13 (line 3), Claim 14 (line 5), Claim 26 (lines 8, 10 and 12) and Claim 38 (lines 8 and 10), each recites "forth transmitter" it should recite --**fourth** transmitter-- instead. Appropriate correction is required.

5. **Claims 13, 26 and 29** are objected to because of the following informalities: Claim 13 (line 2), Claim 26 (line 34) and Claim 29 (line 19), each recites "a-second receiver" it should recite **--a second** receiver-- instead. Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. 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 of this title, 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 negatived by the manner in which the invention was made.

7. **Claims 1, 2, 4-6, 8-19, 21 and 24-41** are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over AARTS (Pub # US 2008/0256216 A1) in view of Hinderks (Pub # US 2001/0025377 A1), and further in view of Dorogusker et al. (U.S. Patent # 8,458,184 B2 hereinafter Dorogusker).

Regarding **claim 1**, AARTS teaches a content delivery system **(a method of supplying advertising content; Page 1, Paragraph 0001)** comprising an application server system **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** and one or more

connection control servers **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)**, the one or more connection control servers being configured to receive equipment specification information transmitted by a user equipment and establish a connection between the application server system and the user equipment based on the received equipment specification information **(the authentication service is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021)**, the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)** comprising: a memory for storing sub content data representing sub content and main content data representing main content **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), and may also track advertisement data sent to a particular user or device; Page 2, Paragraph 0021)**; a first receiver for receiving **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)** a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**; a processor for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or**

indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013); and a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** via the one or more connection control servers **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, wherein the user equipment comprises a second receiver for receiving main content data and sub content data transmitted by the application server system and output **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose wherein the first transmitter is configured to, when the one or more control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the one or more control servers to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Hinderks teaches wherein the first transmitter is configured to, when the one or more control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information **(Para. 0015; Successful transmission of real-time streaming multimedia content, therefore, requires sufficient transmission bandwidth between the server and the client to prevent signal degradation and disruption… Para. 0099; The communication paths provided by satellite 55 in effect produces an overlay network that bypasses or at least somewhat avoids congestion and limitations in at least some of the existing Internet infrastructure, such as in FIG. 1. Moreover, this overlay network provides dedicated, guaranteed bandwidth for the transmission of multimedia data through satellite 55. In the preferred embodiment, the transmissions from the file server station 100 preferably**

include one or more multimedia transmissions formatted in accordance with the IP multicast protocol).

It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Hinderks with AARTS to provide guaranteed bandwidth for the transmission of multimedia **(Hinderks: Para. 0099)**.

However, the combination of AARTS and Hinderks does not specifically disclose transmit the play-list information via the one or more control servers to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Dorogusker teaches transmit the play-list information **(Col. 20, lines 53-56; Similarly, PMD 1212 can automatically transfer stored tags (interpreted as the play-list information) to host computer 1214 whenever PMD 1212 synchronizes with host computer 1214 … Col. 20, lines 19-21; Receiver 1208 can be configured to communicate the tags it creates to PMD 1212 at such times as PMD 1212 is connected to receiver 1208)**, via the one or more control servers to the user equipment which has transmitted the content delivery request **(See Abstract; Each time the user requests a new tag, the accessory generates a tag containing information descriptive of the broadcast material (e.g., song title, artist, radio station identifier, time of tagging, etc.) and writes the tag to the tag file using a write**

command to the PMD), the play-list information **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65)**, being information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio advertisement), etc. When only one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the review is complete, the user may be presented with an**

opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20), and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Dorogusker to the modified system of AARTS and Hinderks to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 2**, the combination of AARTS, Hinderks and Dorogusker, specifically AARTS teaches wherein: the user equipment comprises **(the user device interpreted as "user equipment"; Page 2, Paragraph 0021)**: a third receiver for receiving the selected sub content specification information transmitted by the application server system **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and second transmitter for transmitting **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**, a main content viewing request

containing the main content identification information and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the one or more connection control servers **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**, and the application server system comprises a fourth receiver for receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by the main content identification information contained in the received main content viewing request to the user equipment **(the advertisement service receives a data request in the store (Fig. 1, element 13a) from the user device in accordance to the user's desired content transmitted by the authentication service, and at step 34 transmits the advertisement information to the user device 10; Page 2, Paragraphs 0021 - 0023)**, and for receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by the selected sub content specification information contained in the received sub content viewing request to the user equipment **(Fig. 3, step 30 shows that the advertisement service receives the data request from the user device, and at step 34 transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding **claim 4,** the combination of AARTS and Hinderks, specifically AARTS teaches wherein: the second transmitter is configured to transmit **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** the main content viewing request and the sub content viewing request **(Fig. 2, step 22 shows**

that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022) to the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**.

However, the combination of AARTS and Hinderks does not specifically disclose the third receiver is configured to receive the play-list information transmitted by the application server system; based on the received play-list information.

In an analogous art, Dorogusker teaches the third receiver is configured to receive the play-list information transmitted by the application server system **(after receiving the user's tags from receiver 1208, PMD 1212 can be connected to host computer 1214. Host computer 1214 can read the stored tags from PMD 1212 and produce a list (e.g., a item list or playlist) of the user's tagged content. Host computer 1214 can also use the digital signature on the tag files to verify that the tags originated from an authenticated receiver and/or as a check on data integrity; Col. 20, lines 41 - 47)**; based on the received play-list information **(Host computer 1214 can read the stored tags from PMD 1212 and produce a list (e.g., a item list or playlist) of the user's tagged content; Col. 20, lines 41 - 44)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Dorogusker to the modified system of AARTS and Hinderks to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content

without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 5**, the combination of AARTS, Hinderks and Dorogusker, specifically AARTS teaches wherein: the memory is configured to store the sub content data in association with attribute information representing an attribute of sub content represented by the sub content data **(the content service (Fig. 1, element 11) is configured to store the content information comprising content data to be used in providing an output to the user, and metadata interpreted as to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; the selection information contains user basic information that is information for specifying the attribute information and is information associated with user identification information for identifying a user of the user equipment **(in the system of Fig. 5, the user device receives content data and metadata, but in this example the metadata comprises a pointer to authentications service, and the fig. 4, step 41 shows that the authentication service identifies the user device from the information transmitted; Page 2, Paragraph 0024 and 0029)**; and the processor is configured to select sub content data stored in association with the attribute information specified by the user basic information **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1,**

Paragraph 0013) associated with the user identification information for identifying the user **(at step 33, the advertisement service generates advertisement information in accordance with the received authentication information used for identifying the user device; Page 2, Paragraph 0023)** of the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**.

Regarding **claim 6**, the combination of AARTS, Hinderks and Dorogusker, specifically AARTS teaches wherein: the memory is configured to store the sub content data in association with attribute information representing an attribute of the sub content represented by the sub content data **(the content service (Fig. 1, element 11) is configured to store the content information comprising content data to be used in providing an output to the user, and metadata to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; the selection information contains content basic information that is information for specifying the attribute information and is information associated with the main content identification information for identifying the main content **(the content information comprising content data to be used in providing an output to the user, and metadata to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; and the processor is configured to select sub content data stored in association with the attribute information specified by the content basic information associated with the main content identification information **(the authentication service transmits general information thus allowing an advertisement to be personalized to the user, such as age, gender, geographic information or any other information as appropriate. At step 33, the advertisement service**

generates advertisement information in accordance with the received authentication information; Page 2, Paragraph 0023) contained in the received content delivery request (**Fig. 3, step 30 shows that the advertisement service receives the data request from the user device; Page 2, Paragraph 0023**).

Regarding **claim 8**, the combination of AARTS, Hinderks and Dorogusker, specifically AARTS teaches wherein the one or more connection control servers is configured to establish the connection by exchanging a predetermined connection establishment message with each of the user equipment and the application server system (**the authentication service is configured to authenticate the user devices verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021**); and the first transmitter is configured to transmit the selected sub content specification information to the user equipment (**Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023**) via the one or more control servers (**the authentication service Page 2, Paragraph 0021**) by incorporating the selected sub content specification information in the connection establishment message (**Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information used for establishing connection with the user device; Page 2, Paragraph 0023**).

Regarding **claim 9**, the combination of AARTS, Hinderks and Dorogusker, specifically AARTS teaches wherein: the application server system comprises a service control server and a media server (**an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the**

user information and transmit it to the user device ; Page 1, Paragraph 0013); and the service control server comprises the memory for storing sub content data (**the advertisement service stores advertisement information in store (Fig. 1, element 13a**), the first receiver for receiving the content delivery request (**the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021**), and the first transmitter for transmitting the selected sub content specification information (**Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023**).

Regarding **claim 10**, the combination of AARTS, Hinderks and Dorogusker, specifically AARTS teaches wherein: the application server system comprises a service control server and a media server (**an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013**); the service control server comprises the memory for storing sub content data (**the advertisement service stores advertisement information in store (Fig. 1, element 13a)**), the media server comprises the memory (**the advertisement service stores advertisement information in store (Fig. 1, element 13a), the sub content selection unit (Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023**), the processor (**the advertisement service stores advertisement information in store (Fig. 1, element 13a**), and the first transmitter (**Fig. 3, step 34 shows that the**

advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023); the service control server further comprises a third transmitter for transmitting the selection information to the media server (**Fig. 3, step 34 shows that the advertisement service transmits the advertisement information; Page 2, Paragraph 0023**) via the one or more connection control servers (**the authentication service; Page 2, Paragraph 0021**); the media server further comprises a fifth receiver for receiving the selection information transmitted by the service control server (**Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022**); and the processor is configured to select the sub content data based on the received selection information (**the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023**).

Regarding **claim 11**, AARTS teaches a content delivery system (**a method of supplying advertising content; Page 1, Paragraph 0001**) comprising an application server system (**an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021**) and one or more connection control servers (**an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021**), the one or more connection control servers comprising a sixth receiver for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information (**the authentication service is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021**),

the application server system comprising **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**: a forth transmitter for transmitting content data representing content to the user equipment **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** with which the connection is established by the sixth receiver **((Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; a controller for controlling a service provided by the fourth transmitter **(an advertisement server is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and a second memory for storing profile information of a user of the user equipment **(the user information store (Fig. 1, element 16a) comprise demographic information corresponding to the user; Page 1, Paragraph 0010)**, the forth transmitter comprising a memory for storing sub content data representing sub content and main content data representing main content **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), and may also track advertisement data sent to a particular user or device; Page 2, Paragraph 0021)**, the controller comprising: a first receiver for receiving **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)** a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the sixth receiver**(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs**

0021 - 0022); and an processor for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)** and preliminarily stored by the user profile server functions part **(Fig. 2, step 21 shows that the user device receives data including content information from the content service; Page 2, Paragraph 0022)**, the controller or the one or more connection control servers; **(the authentication service; Page 2, Paragraph 0021)**; and a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data via the sixth receiver to the user equipment which has transmitted the content delivery request **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, wherein the user equipment comprises a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub**

content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023).

However, AARTS does not specifically disclose wherein the first transmitter is configured to, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting a content data as a process for establishing the connection, transmit the play-list information via the sixth receiver to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Hinderks teaches wherein the first transmitter is configured to, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting a content data as a process for establishing the connection, transmit the play-list information (**Para. 0015; Successful transmission of real-time streaming multimedia content, therefore, requires sufficient transmission bandwidth between the server and the client to prevent signal degradation and disruption… Para. 0099; The communication paths provided by satellite 55 in effect produces an overlay network that bypasses or at least somewhat avoids congestion and limitations in at least some of the existing Internet infrastructure, such as in FIG. 1. Moreover, this overlay network provides dedicated, guaranteed bandwidth for the transmission of multimedia data through satellite**

55. In the preferred embodiment, the transmissions from the file server station 100 preferably include one or more multimedia transmissions formatted in accordance with the IP multicast protocol).

It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Hinderks with AARTS to provide guaranteed bandwidth for the transmission of multimedia **(Hinderks: Para. 0099)**.

However, the combination of AARTS and Hinderks does not specifically disclose transmit the play-list information via the sixth receiver to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Dorogusker teaches transmit the play-list information via the sixth receiver to the user equipment which has transmitted the content delivery request **(Col. 10, lines 38-41; PMD 190 can be adapted to connect to a data network, e.g., via wired or wireless connection (not explicitly shown in FIG. 1F)… Col. 20, lines 48-53; The transfer of tags from receiver 1208 to PMD 1212 and the transfer of tags from PMD 1212 to host computer 1214 can be fully automated; that is, receiver 1208 can automatically detect when PMD 1212 is connected thereto and can automatically transfers the tags (including any accumulated tags) whenever a connection is detected)**, the play-list information **(In step 810,**

PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65) being information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio advertisement), etc. When only one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the review is complete, the user may be presented with an opportunity to purchase the items or**

advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20), and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Dorogusker to the modified system of AARTS and Hinderks to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 12**, the combination of AARTS, Hinderks and Dorogusker, specifically AARTS teaches wherein: the user equipment comprises **(the user device interpreted as "user equipment"; Page 2, Paragraph 0021)**: a third receiver for receiving the selected sub content specification information transmitted by the controller **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and a second transmitter for transmitting **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the forth transmitter **(the advertisement service; Page 2, Paragraph 0021)**, a main content viewing request containing the main content identification information and an sub content

viewing request containing the received selected sub content specification information **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**, when connection with the forth transmitter is established by the sixth receiver, **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**, and the forth transmitter comprises a fourth receiver for receiving the main content viewing request transmitted by the user equipment and transmitting to the user equipment main content data identified by the main content identification information contained in the received main content viewing request **(the advertisement service receives a data request in the store (Fig. 1, element 13a) from the user device in accordance to the user's desired content transmitted by the authentication service, and at step 34 transmits the advertisement information to the user device 10; Page 2, Paragraphs 0021 - 0023)**, and for receiving the sub content viewing request transmitted by the user equipment and transmitting to the user equipment sub content data specified by the selected sub content specification information contained in the received sub content viewing request **(Fig. 3, step 30 shows that the advertisement service receives the data request from the user device, and at step 34 transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding **claim 13**, the combination of AARTS, Hinderks and Dorogusker, specifically AARTS teaches wherein the user equipment comprises a second receiver for receiving main content data and sub content data transmitted by the forth transmitter **(Fig. 2, step 23 shows that**

the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022), and outputting (**at step 24 generates an output; Page 2, Paragraph 0022**), based on the received main content data and sub content data (**in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022**), viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data (**the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023**).

Regarding **claim 14**, the combination of AARTS, Hinderks, specifically AARTS teaches wherein the third receiver is configured to receive (**Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022**); and the second transmitter is configured to transmit (**Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022**) the main content viewing request and the sub content viewing request (**Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022**) to the forth transmitter (**the advertisement service ; Page 2, Paragraph 0021**).

However, the combination of AARTS, Hinderks, specifically does not specifically disclose the play-list information transmitted by the controller; based on the received play-list information.

In an analogous art, Dorogusker teaches the play-list information transmitted by the controller **(Host computer 1214 can read the stored tags from PMD 1212 and produce a list (e.g., a item list or playlist) of the user's tagged content; Col. 20, lines 41 - 44);** based on the received play-list information **(Host computer 1214 can read the stored tags from PMD 1212 and produce a list (e.g., a item list or playlist) of the user's tagged content; Col. 20, lines 41 - 44)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Dorogusker to the modified system of AARTS and Hinderks to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 15**, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding **claim 16**, the claim is interpreted and rejected for the same reason as set forth in claim 2.

Regarding **claim 17**, the combination of AARTS, Hinderks and Dorogusker, specifically AARTS teaches receiving the main content data and the sub content data transmitted by the application server system **(Fig. 2, step 23 shows that the user device receives advertisement**

information from the advertisement service; Page 2, Paragraph 0022), and outputting (**Fig. 2, step 24 generates an output; Page 2, Paragraph 0022**), based on the received main content data and sub content data (**in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022**), viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data, by the user equipment (**the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023**).

Regarding **claim 18**, the claim is interpreted and rejected for the same reason as set forth in claim 4.

Regarding **claim 19**, AARTS teaches a server control server (**an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021**) comprising: a first receiver for receiving a content delivery request containing main content identification information for identifying main content (**the advertisement device is operable to receive a data request (Fig. 1, element 14) from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022**) and transmitted by a user equipment (**Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022**) via a one or more connection control servers establishing connection between a media server and the user equipment (**Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph**

0023); a processor for selecting sub content data preliminarily stored in a storing device **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**, based on selection information containing attribute information representing an attribute of sub content **(the content information comprising content data to be used in providing an output to the user, and metadata to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; and first transmitter for transmitting selected sub content specification information specifying the selected content data via the one or more connection control servers to the user equipment which has transmitted the content delivery request **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, wherein the user equipment comprises a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose wherein the first transmitter is configured to, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Hinderks teaches wherein the first transmitter is configured to, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information **(Para. 0015; Successful transmission of real-time streaming multimedia content, therefore, requires sufficient transmission bandwidth between the server and the client to prevent signal degradation and disruption… Para. 0099; The communication paths provided by satellite 55 in effect produces an overlay network that bypasses or at least somewhat avoids congestion and limitations in at least some of the existing Internet infrastructure, such as in FIG. 1. Moreover, this overlay network provides dedicated, guaranteed bandwidth for the transmission of multimedia data through satellite 55. In the preferred embodiment, the transmissions from the file server station 100**

preferably include one or more multimedia transmissions formatted in accordance with the IP multicast protocol).

It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Hinderks with AARTS to provide guaranteed bandwidth for the transmission of multimedia **(Hinderks: Para. 0099)**.

However, the combination of AARTS and Hinderks does not specifically disclose transmit the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Dorogusker teaches transmit the play-list information **(Col. 20, lines 53-56; Similarly, PMD 1212 can automatically transfer stored tags (interpreted as the play-list information) to host computer 1214 whenever PMD 1212 synchronizes with host computer 1214 … Col. 20, lines 19-21; Receiver 1208 can be configured to communicate the tags it creates to PMD 1212 at such times as PMD 1212 is connected to receiver 1208)**, via the one or more connection control servers to the user equipment which has transmitted the content delivery request **(See Abstract; Each time the user requests a new tag, the accessory generates a tag containing information descriptive of the broadcast material (e.g., song title, artist, radio station identifier, time of tagging, etc.) and writes the tag to the tag file**

using a write command to the PMD), the play-list information **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65)** being information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio advertisement), etc. When only one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the**

review is complete, the user may be presented with an opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20), and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output (**In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65**).

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Dorogusker to the modified system of AARTS and Hinderks to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system (**Dorogusker: Col. 21, lines 13 - 19**).

Regarding **claim 21**, AARTS teaches a user equipment comprising (**the user device interpreted as "user equipment"; Page 2, Paragraph 0021**): a third receiver for receiving selected sub content specification information (**Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022**) selected based on selection information containing attribute information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application server system (**the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or**

geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013), via one or more control servers establishing connection between the application server system and the user equipment **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023**); a second transmitter for transmitting **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022**), to the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021**), a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the one or more connection control servers **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022**), wherein the second transmitter **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022**) is configured to transmit the main content viewing request and the sub content viewing request to the application server system **(Fig. 2,**

step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022), a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting (**Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022**), based on the received main content data and sub content data (**in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data (**the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023**).

However, AARTS does not specifically disclose wherein the third receiver is configured to, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, receive the play-list information transmitted by an application server system, via the connection control system to the user equipment which has transmitted the content delivery request, wherein the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification

information and the sub content specified by the selected sub content specification information are output; based on the received play-list information.

In an analogous art, Hinderks teaches wherein the third receiver is configured to, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, receive the play-list information transmitted **(Para. 0015; Successful transmission of real-time streaming multimedia content, therefore, requires sufficient transmission bandwidth between the server and the client to prevent signal degradation and disruption… Para. 0099; The communication paths provided by satellite 55 in effect produces an overlay network that bypasses or at least somewhat avoids congestion and limitations in at least some of the existing Internet infrastructure, such as in FIG. 1. Moreover, this overlay network provides dedicated, guaranteed bandwidth for the transmission of multimedia data through satellite 55. In the preferred embodiment, the transmissions from the file server station 100 preferably include one or more multimedia transmissions formatted in accordance with the IP multicast protocol)**.

It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Hinderks with AARTS to provide guaranteed bandwidth for the transmission of multimedia **(Hinderks: Para. 0099)**.

However, the combination of AARTS and Hinderks does not specifically disclose receive the play-list information transmitted by an application server system, via the connection control system to the user equipment which has transmitted the content delivery request, wherein the play-list information being information containing the main content identification information

contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output; based on the received play-list information.

In an analogous art, Dorogusker teaches receive the play-list information transmitted by an application server system, via the connection control system to the user equipment which has transmitted the content delivery request **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65)**, wherein the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio advertisement), etc. When only**

one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the review is complete, the user may be presented with an opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20), and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**; based on the received play-list information **(Host computer 1214 can read the stored tags from PMD 1212 and produce a list (e.g., a item list or playlist) of the user's tagged content; Col. 20, lines 41 - 44)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Dorogusker to the modified system of AARTS and Hinderks to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content

without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 24**, the combination of AARTS, Hinderks and Dorogusker, specifically AARTS teaches wherein the sub content is advertisement content **(advertisement information; Page 1, Paragraph 0005)**.

Regarding **claim 25**, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding **claim 26**, the claim is interpreted and rejected for the same reason as set forth in claim 11.

Regarding **claim 27**, the claim is interpreted and rejected for the same reason as set forth in claim 19.

Regarding **claim 28**, the claim is interpreted and rejected for the same reason as set forth in claim 21.

Regarding **claim 29**, AARTS teaches a server comprising: store a plurality of sub content data and a plurality of main content data **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), and may also track advertisement data sent to a particular user or device; Page 2, Paragraph 0021)**, wherein each of the plurality of sub content data is associated with one or more sub content attributes **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as**

"the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013); receive a content delivery request from a user device **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)**, wherein the content delivery request identifies first main content data of the plurality of main content data **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**; select at least first sub content data and second sub content data from the plurality of sub content data based on the first sub content data and the second sub content data being associated with at least a particular attribute of the sub content attributes **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**; transmit a first choice option corresponding to the first sub content data and a second choice option corresponding to the second sub content data to the user device **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, wherein the user device comprises a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received**

content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022), viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose a memory; and one or more processors, wherein the one or more processors are configured to: transmit play-list information to the user device via a connection established by one or more connection control servers when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process to establish a connection, wherein the play-list information identifies the main content, the first sub content data, the second sub content data, and a sequence in which the main content, the first sub content data, the second sub content data are to be output.

In an analogous art, Hinderks teaches wherein the one or more processors are configured to: transmit play-list information to the user device via a connection established by one or more connection control servers when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process to establish a connection **(Para. 0015; Successful transmission of real-time streaming multimedia content, therefore, requires sufficient transmission bandwidth between the server and the client to prevent signal degradation and disruption… Para. 0099; The communication paths provided by satellite 55 in effect produces an overlay network that**

bypasses or at least somewhat avoids congestion and limitations in at least some of the existing Internet infrastructure, such as in FIG. 1. Moreover, this overlay network provides dedicated, guaranteed bandwidth for the transmission of multimedia data through satellite 55. In the preferred embodiment, the transmissions from the file server station 100 preferably include one or more multimedia transmissions formatted in accordance with the IP multicast protocol).

It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Hinderks with AARTS to provide guaranteed bandwidth for the transmission of multimedia **(Hinderks: Para. 0099)**.

However, the combination of AARTS and Hinderks does not specifically disclose a memory; and one or more processors, wherein the play-list information identifies the main content, the first sub content data, the second sub content data, and a sequence in which the main content, the first sub content data, the second sub content data are to be output.

In an analogous art, Dorogusker teaches a memory **(memory; Col. 14, line 60)**; and one or more processors **(programmable processors; Col. 22, lines 62-63)**; wherein the play-list information identifies the main content **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the**

advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65), the first sub content data, the second sub content data, and a sequence in which the main content, the first sub content data, the second sub content data are to be output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Dorogusker to the modified system of AARTS and Hinderks to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 30**, the combination of AARTS, Hinderks and Dorogusker, specifically AARTS teaches wherein the one or more processors are further configured to: receive a sub content viewing request from the user device, wherein the sub content viewing request contains a selected choice corresponding to either the first choice option or the second choice option **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**; transmit the first sub content data to the user device as selected sub content data if the selected choice corresponds to the first choice option; transmit the second sub content data to the user device as the selected

sub content data if the selected choice corresponds to the second choice option **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**; and transmit the first main content data identified by the content delivery request to the user device **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding **claim 31**, the combination of AARTS, Hinderks and Dorogusker, specifically AARTS teaches wherein a user inputs a selection command to the user device to select the first choice option or the second choice option as the selected choice **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**.

Regarding **claim 32**, the combination of AARTS, Hinderks and Dorogusker, specifically AARTS teaches wherein one or more processors are configured to: transmit the first main content data and the selected sub content data to the user device for viewing on the user device **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding **claim 33**, the combination of AARTS, Hinderks and Dorogusker, specifically AARTS teaches discloses wherein the content delivery request from the user device contains

user information about a user of the user device **(the user information store (Fig. 1, element 16a) comprise demographic information corresponding to the user; Page 1, Paragraph 0010)**, and wherein the one or more processors are further configured to select the first sub content data and the second sub content data when the particular attribute corresponds to the user information **(an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**.

Regarding **claim 34**, the claim is interpreted and rejected for the same reason as set forth in claim 33.

Regarding **claim 35**, the combination of AARTS, Hinderks and Dorogusker, specifically AARTS teaches discloses wherein the one or more processors are further configured: associate each of the plurality of main content data with one or more main content attributes **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**; select the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content **(Fig. 3, step 33 shows that the authentication service generates advertisement information in**

accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023).

Regarding **claim 36**, the claim is interpreted and rejected for the same reason as set forth in claim 35.

Regarding **claim 37**, AARTS teaches a content delivery system (**a method of supplying advertising content; Page 1, Paragraph 0001**) comprising an application server system (**an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021**) and one or more connection control serves (**an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021**), the one or more connection control servers being configured to receive user identification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received user identification information (**the authentication service is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021**), the application server system (**the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021**) comprising: a first receiver for receiving (**the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021**) a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content, via the one or more connection control servers (**the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content**

information; Page 2, Paragraphs 0021 - 0022); a processor for selecting the sub content data based on user basic information or the main content identification information (**the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013**), the user basic information being associated with the user identification information for identifying a user of the user equipment having transmitted the content delivery request, and the main content identification information being contained by the content delivery request (**transmitting a data request to the advertisement service in accordance with the metadata, transmitting an authentication request to an authentication server, receiving an authentication response, the authentication response comprising user information, and transmitting advertisement information in accordance with the user information; Page 1, Paragraph 0005**); and a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data (**Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023**) via the one or more connection control servers (**an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021**) to the user equipment which has transmitted the content delivery request (**Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022**).

However, AARTS does not specifically disclose wherein the first transmitter is configured to, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Hinderks teaches wherein the first transmitter is configured to, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information **(Para. 0015; Successful transmission of real-time streaming multimedia content, therefore, requires sufficient transmission bandwidth between the server and the client to prevent signal degradation and disruption… Para. 0099; The communication paths provided by satellite 55 in effect produces an overlay network that bypasses or at least somewhat avoids congestion and limitations in at least some of the existing Internet infrastructure, such as in FIG. 1. Moreover, this overlay network provides dedicated, guaranteed bandwidth for the transmission of multimedia data through satellite 55. In the preferred embodiment, the transmissions from the file server station 100**

preferably include one or more multimedia transmissions formatted in accordance with the IP multicast protocol).

It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Hinderks with AARTS to provide guaranteed bandwidth for the transmission of multimedia **(Hinderks: Para. 0099)**.

However, the combination of AARTS and Hinderks does not specifically disclose transmit the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Dorogusker teaches transmit the play-list information **(Col. 20, lines 53-56; Similarly, PMD 1212 can automatically transfer stored tags (interpreted as the play-list information) to host computer 1214 whenever PMD 1212 synchronizes with host computer 1214 … Col. 20, lines 19-21; Receiver 1208 can be configured to communicate the tags it creates to PMD 1212 at such times as PMD 1212 is connected to receiver 1208)**, via the one or more connection control servers to the user equipment which has transmitted the content delivery request **(See Abstract; Each time the user requests a new tag, the accessory generates a tag containing information descriptive of the broadcast material (e.g., song title, artist, radio station identifier, time of tagging, etc.) and writes the tag to the tag file**

using a write command to the PMD), the play-list information **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65)** being information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio advertisement), etc. When only one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the**

review is complete, the user may be presented with an opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20), and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Dorogusker to the modified system of AARTS and Hinderks to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 38**, AARTS teaches a content delivery system **(a method of supplying advertising content; Page 1, Paragraph 0001)** comprising an application server system **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** and one or more connection control servers **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)**, the one or more connection control servers comprising a sixth receiver for receiving user identification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received user identification information **(the authentication service is configured to receive**

information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021), the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)** comprising: a forth transmitter for transmitting content data representing content to the user equipment **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** with which connection is established by the sixth receiver **((Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; a controller for controlling a service provided by the forth transmitter **(an advertisement server is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and a second memory for storing profile information of a user of the user equipment **(the user information store (Fig. 1, element 16a) comprise demographic information corresponding to the user; Page 1, Paragraph 0010)**, and the controller comprising: a first receiver for receiving **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)** a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the sixth receiver; **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**, and a processor for selecting sub content data based on user basic or the main content identification information **(Fig. 3, step 33**

shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023), the user basic information being associated with the user identification information for identifying a user of the user equipment having transmitted the content delivery request, and the main content identification information being contained by the content delivery request **transmitting a data request to the advertisement service in accordance with the metadata, transmitting an authentication request to an authentication server, receiving an authentication response, the authentication response comprising user information, and transmitting advertisement information in accordance with the user information; Page 1, Paragraph 0005**); and a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data via the sixth receiver to the user equipment which has transmitted the content delivery request **Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023**).

However, AARTS does not specifically disclose wherein the first transmitter is configured to, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the sixth receiver to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list

information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Hinderks teaches wherein the first transmitter is configured to, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information **(Para. 0015; Successful transmission of real-time streaming multimedia content, therefore, requires sufficient transmission bandwidth between the server and the client to prevent signal degradation and disruption… Para. 0099; The communication paths provided by satellite 55 in effect produces an overlay network that bypasses or at least somewhat avoids congestion and limitations in at least some of the existing Internet infrastructure, such as in FIG. 1. Moreover, this overlay network provides dedicated, guaranteed bandwidth for the transmission of multimedia data through satellite 55. In the preferred embodiment, the transmissions from the file server station 100 preferably include one or more multimedia transmissions formatted in accordance with the IP multicast protocol)**.

It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Hinderks with AARTS to provide guaranteed bandwidth for the transmission of multimedia **(Hinderks: Para. 0099)**.

However, the combination of AARTS and Hinderks does not specifically disclose transmit the play-list information via the sixth receiver to the user equipment which has transmitted the content delivery request, the play-list information being information containing

the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output

In an analogous art, Dorogusker teaches transmit the play-list information via the sixth receiver to the user equipment which has transmitted the content delivery request **(Col. 10, lines 38-41; PMD 190 can be adapted to connect to a data network, e.g., via wired or wireless connection (not explicitly shown in FIG. 1F)… Col. 20, lines 48-53; The transfer of tags from receiver 1208 to PMD 1212 and the transfer of tags from PMD 1212 to host computer 1214 can be fully automated; that is, receiver 1208 can automatically detect when PMD 1212 is connected thereto and can automatically transfers the tags (including any accumulated tags) whenever a connection is detected)**, the play-list information **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65)** being information containing the main content identification information

contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio advertisement), etc. When only one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the review is complete, the user may be presented with an opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20)**, and is the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Dorogusker to the modified system of AARTS

and Hinderks to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 39**, the claim is interpreted and rejected for the same reason as set forth in claim 37.

Regarding **claim 40**, AARTS teaches a non-transitory computer-readable medium storing a program comprising instructions for causing a service control server to realize: a first receiver for receiving a content delivery request containing main content identification information for identifying main content **(the advertisement device is operable to receive a data request (Fig. 1, element 14) from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)** and transmitted by a user equipment **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** via one or more connection control servers establishing connection between a media server and the user equipment **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; a processor for selecting sub content data based on content basic information associated with the main content identification information contained by the content delivery request **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**; and a first transmitter for transmitting

selected sub content specification information specifying the selected sub content data via the one or more connection control servers to the user equipment which has transmitted the content delivery request **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose wherein the first transmitter for, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmitting the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Hinderks teaches wherein the first transmitter for, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmitting the play-list information **(Para. 0015; Successful transmission of real-time streaming multimedia content, therefore, requires sufficient transmission bandwidth between the server and the client to prevent signal degradation and disruption… Para. 0099; The communication paths provided by satellite 55 in effect produces an overlay network that bypasses or at least somewhat avoids congestion and limitations in at least some of the**

existing Internet infrastructure, such as in FIG. 1. Moreover, this overlay network provides dedicated, guaranteed bandwidth for the transmission of multimedia data through satellite 55. In the preferred embodiment, the transmissions from the file server station 100 preferably include one or more multimedia transmissions formatted in accordance with the IP multicast protocol).

It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Hinderks with AARTS to provide guaranteed bandwidth for the transmission of multimedia **(Hinderks: Para. 0099)**.

However, the combination of AARTS and Hinderks does not specifically disclose transmitting the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Dorogusker teaches transmitting the play-list information **(Col. 20, lines 53-56; Similarly, PMD 1212 can automatically transfer stored tags (interpreted as the play-list information) to host computer 1214 whenever PMD 1212 synchronizes with host computer 1214 … Col. 20, lines 19-21; Receiver 1208 can be configured to communicate the tags it creates to PMD 1212 at such times as PMD 1212 is connected to receiver 1208)**, via the one or more connection control servers to the user equipment which has transmitted the

content delivery request **(See Abstract; Each time the user requests a new tag, the accessory generates a tag containing information descriptive of the broadcast material (e.g., song title, artist, radio station identifier, time of tagging, etc.) and writes the tag to the tag file using a write command to the PMD)**, the play-list information **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65)** being information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio advertisement), etc. When only one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the**

selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the review is complete, the user may be presented with an opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20), and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(In step 830, an advertisement tag is generated. <u>In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840;</u> Col. 17, lines 62 – 65)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Dorogusker to the modified system of AARTS and Hinderks to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **<u>claim 41</u>**, the claim is interpreted and rejected for the same reason as set forth in claim 40.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATALI N. PASCUAL PEGUERO whose telephone number is (571)272-4691. The examiner can normally be reached on Monday - Friday 11:30am - 8:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MARK H. RINEHART can be reached on (571)272-3632. 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 http://pair-direct.uspto.gov. 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.

/NATALI N PASCUAL PEGUERO/
Examiner, Art Unit 2463

/MANG YEUNG/
Primary Examiner, Art Unit 2463

Notice of References Cited	Application/Control No. 13/129,756	Applicant(s)/Patent Under Reexamination TANIGUCHI ET AL.	
	Examiner NATALI N. PASCUAL	Art Unit 2463	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-2001/0025377 A1	09-2001	Hinderks, Larry W.	H04L12/1859	725/109
	B	US-				
	C	US-				
	D	US-				
	E	US-				
	F	US-				
	G	US-				
	H	US-				
	I	US-				
	J	US-				
	K	US-				
	L	US-				
	M	US-				

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.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	Art Unit
	NATALI N PASCUAL PEGUERO	2463

CPC- SEARCHED		
Symbol	Date	Examiner
H04L 29/08072, H04L 29/06, H04L 29/0809, H04L 29/08981 and H04L29/08117	2/20/2014	NP

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
709	217,219		

SEARCH NOTES		
Search Notes	Date	Examiner
East Search including keywords,class/subclass,inventor,assignee	5/1/2013	NP
IP.com Patent Search	5/1/2013	NP
Updated Search in EAST	2/20/2014	NP
H04L 29/08072, H04L 29/06, H04L 29/0809, H04L 29/08981 and H04L29/08117 (Text Search only)	2/20/2014	NP
Updated Search in EAST	9/5/2014	NP
Updated Search in EAST	3/23/2015	NP
Updated Search in EAST	9/2/2015	NP
Updated Search in EAST	3/9/2016	NP
Updated Search in EAST	1/8/2017	NP

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

/NATALI N PASCUAL PEGUERO/ Examiner.Art Unit 2463	

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	31	(guarant$5 near2 bandwidth) with (transmi$5) near2 (multimedia content play$1list)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/09 00:00
L2	31	(guarant$5 near2 bandwidth) with ((transmi$5) near2 (multimedia content play$1list))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/09 00:00
L3	41	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/09 00:01
L4	245	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/09 00:01
L5	57	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/09 00:01
L6	45978	((NEC) near2 (CORPORATION)).AS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/09 00:02
L7	2	3 and ((application near2 server) and (sub near2 content) and (play$1list near2 information)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/09 00:03
L8	2	4 and ((application near2 server) and (sub near2 content) and (play$1list near2 information)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/09 00:03
L9	2	5 and ((application near2 server) and (sub near2 content) and (play$1list near2 information)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/09 00:03
L10	0	6 and ((application near2 server) and (sub near2 content) and (play$1list near2 information)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/09 00:03

S1	1	"13129756"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 12:02
S2	2	"20110225270"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 12:22
S4	4	"2008022298"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 15:13
S6	1	"12099489"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 15:55
S7	4	"10287835"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 16:29
S8	2	"20030105669"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 16:30
S16	2639	((core near2 IMS) or (core near2 (Internet adj Protocol adj Multimedia adj Subsystem)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:56
S17	1275	@ad< "20081118" and S16	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:57
S18	67	S17 and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:57
S19	60	S18 and (user near2 (device or equipment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:58
S23	20	S19 and "370".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:01
S24	20	S16 and S23	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:02

S25	18	S19 and "709".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:07
S26	1	"13063122"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 21:21
S32	21	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:17
S33	173	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:18
S34	36	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:18
S36	10	("20030105669" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:24
S37	40211	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:26
S38	21	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:28
S39	2	S38 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:28
S40	173	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S41	2	S40 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S42	36	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29

S43	2	S42 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S44	908	(Application near2 server) and (connection near2 control) and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:34
S45	502	@ad< "20081118" and S44	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:35
S46	235	S45 and ((user near2 (device or equipment)) and (storage) and (user near2 information))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:36
S47	19	S46 and 709/219,217.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
S48	5409367	(content delivery system).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
S49	2	S48 and S41	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
S50	702	S44 and (delivery)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:38
S51	44	S50 and 709/219,217.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:38
S52	37	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:40
S53	239	((KAZUO) near2 (ASAMI)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:41
S54	49	((KUNIHIRO) near2 (TANIGUCHI)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:41

S55	41734	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:42
S56	2	S52 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S57	2	S53 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S58	2	S54 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S59	0	S55 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S60	12	("20030105669" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:28
S61	2	S60 and attribute	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:28
S62	74272	(H04L29/08072 H04L29/06 H04L29/0809 H04L29/08981 H04L29/08117).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38
S63	3124	S62 and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38
S64	844	S63 and attribute	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38
S65	1509	"I14" and delivery	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:39
S66	14	S65 and (content near2 selection)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:39

S67	1	@ad< "20081118" and S66	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:40
S68	69263	@ad< "20081118" and S62	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:40
S69	159	S68 and (advertisement and (content near2 selection))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:41
S70	37	S69 and (application near2 server)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:41
S71	1	"13129756"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 13:41
S72	39	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:30
S73	241	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:30
S74	50	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:30
S75	42659	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
S77	2	S72 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
S78	2	S73 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
S79	2	S74 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31

S80	0	S75 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
S81	12	("20030105669" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:34
S82	40	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:22
S83	243	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:22
S84	52	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:23
S85	43416	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:23
S86	2	S82 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:23
S87	2	S83 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:23
S89	2	S84 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:24
S90	0	S85 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:24
S91	40	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:12
S92	52	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:12

S93	243	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:12
S94	44046	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:13
S95	2	S91 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:13
S96	2	S92 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:13
S97	2	S93 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:13
S98	16	("8458184" | "20030105669" | "20070186003" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:14
S99	3	S98 and (play$1list)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:14
S100	5042	(advertis$6) with (list or play$1list) with (display$6 output$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:15
S101	548	(advertis$6) with (list or play$1list) with (display$6 output$6) with (user near6 select$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:16
S102	268	@ad< "20081118" and S101	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:16
S103	102	(advertis$6) with (list or play$1list) with (display$6 output$6) with (user near6 select$6) with (broadcas$6 transmit$6 send$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:18
S104	38	@ad< "20081118" and S103	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2015/09/02 22:19

			IBM_TDB			
S105	1	"13129756"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:27
S106	5583	(G06F15/16).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:27
S108	102	S103 and S100	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:28
S109	13	"2010010716"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/03 11:54
S110	5	"20100107162"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/03 11:55
S111	53	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:28
S112	40	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:28
S113	243	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:28
S114	44870	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:29
S115	2	S111 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:29
S116	2	S112 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:29
S117	2	S113 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2016/03/09 22:29

			IBM_TDB			
S118	0	S114 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:30
S119	3	"20080256216"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:30
S120	2	"8458184".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:31

EAST Search History (Interference)

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Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	Art Unit
	NATALI N PASCUAL PEGUERO	2463

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

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/01/2013	02/20/2014	09/05/2014	03/23/2015	09/02/2015	03/09/2016	01/08/2017		
	1	✓	✓	✓	✓	✓	✓	✓		
	2	✓	✓	✓	✓	✓	✓	✓		
	3	✓	✓	✓	-	-	-	-		
	4	✓	✓	✓	✓	✓	✓	✓		
	5	✓	✓	✓	✓	✓	✓	✓		
	6	✓	✓	✓	✓	✓	✓	✓		
	7	✓	✓	-	-	-	-	-		
	8	✓	✓	✓	✓	✓	✓	✓		
	9	✓	✓	✓	✓	✓	✓	✓		
	10	✓	✓	✓	✓	✓	✓	✓		
	11	✓	✓	✓	✓	✓	✓	✓		
	12	✓	✓	✓	✓	✓	✓	✓		
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	25	✓	✓	✓	✓	✓	✓	✓		
	26	✓	✓	✓	✓	✓	✓	✓		
	27	✓	✓	✓	✓	✓	✓	✓		
	28	✓	✓	✓	✓	✓	✓	✓		
	29		✓	✓	✓	✓	✓	✓		
	30		✓	✓	✓	✓	✓	✓		
	31		✓	✓	✓	✓	✓	✓		
	32		✓	✓	✓	✓	✓	✓		
	33		✓	✓	✓	✓	✓	✓		
	34		✓	✓	✓	✓	✓	✓		
	35		✓	✓	✓	✓	✓	✓		
	36		✓	✓	✓	✓	✓	✓		

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	Art Unit
	NATALI N PASCUAL PEGUERO	2463

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

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/01/2013	02/20/2014	09/05/2014	03/23/2015	09/02/2015	03/09/2016	01/08/2017		
	37			✓	✓	✓	✓	✓		
	38			✓	✓	✓	✓	✓		
	39			✓	✓	✓	✓	✓		
	40			✓	✓	✓	✓	✓		
	41			✓	✓	✓	✓	✓		

PTO/SB/30EFS (07-14)
Approved for use through 07/31/2016. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	13129756	Filing Date	2011-05-17	Docket Number (if applicable)	2207946.00141US1	Art Unit	2463
First Named Inventor	Kunihiro TANIGUCHI			Examiner Name	N. Pascual Peguero		

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, to any international application that does not comply with the requirements of 35 U.S.C. 371, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV.

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).

☐ 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.

- ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ☐ Other _____

☒ Enclosed

- ☒ Amendment/Reply
- ☐ Information Disclosure Statement (IDS)
- ☐ Affidavit(s)/ Declaration(s)
- ☐ Other _____

MISCELLANEOUS

☐ 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)

☐ Other _____

FEES

The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

☒ The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 08-0219

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

Applicant Signature

PTO/SB/30EFS (07-14)
Approved for use through 07/31/2016. OMB 0651-0031
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Signature of Registered U.S. Patent Practitioner			
Signature	/Michael Smith/	Date (YYYY-MM-DD)	2016-12-09
Name	Michael H. Smith	Registration Number	71190

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.

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

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.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

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 Patent Application Fee Transmittal

Application Number:	13129756
Filing Date:	17-May-2011
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Filer:	Michael Hal Smith/Lisa Morris
Attorney Docket Number:	J-11-0248

Filed as Large Entity

Filing Fees for U.S. National Stage under 35 USC 371

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($)
Miscellaneous:				
RCE- 2ND AND SUBSEQUENT REQUEST	1820	1	1700	1700
		Total in USD ($)		**1700**

Electronic Acknowledgement Receipt

EFS ID:	27753703
Application Number:	13129756
International Application Number:	
Confirmation Number:	1971
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Customer Number:	71799
Filer:	Michael Hal Smith/Lisa Morris
Filer Authorized By:	Michael Hal Smith
Attorney Docket Number:	J-11-0248
Receipt Date:	09-DEC-2016
Filing Date:	17-MAY-2011
Time Stamp:	19:07:37
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$1700
RAM confirmation Number	121216INTEFSW19095400
Deposit Account	080219
Authorized User	Lisa Morris

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

37 CFR 1.17 (Patent application and reexamination processing fees)

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

37 CFR 1.492 (National application filing, search, and examination fees)

37 CFR 1.492(a) (Basic national fee only)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		2207946_00141US1_Amendment_in_Response_to_Notice_of_Panel_Decision.PDF	194623 55b77d46117096f10580ec127a003c94277719b4	yes	26

Multipart Description/PDF files in .zip description		
Document Description	**Start**	**End**
Applicant Arguments/Remarks Made in an Amendment	23	26
Claims	2	22
Amendment Submitted/Entered with Filing of CPA/RCE	1	1

Warnings:

Information:

2	Request for Continued Examination (RCE)	2207946_00141US1_Request_for_Continued_Examination.PDF	1349833 0c27a338b33b3fdf9bddc0a7eddfe6196e5c3439	no	3

Warnings:

Information:

3	Fee Worksheet (SB06)	fee-info.pdf	30478 1edf7bcc53b93742f4183fd3ef8344c016a13fdd	no	2

Warnings:

Information:

Total Files Size (in bytes):	1574934

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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

Claims 1, 2, 4-6, 8-10, 15-19, 21, 24, 25, 27-37 and 39-41 were rejected under 35 USC § 103(a) over U.S. Patent Application Publication No. 2008/0256216 to AARTS ("AARTS") in view of U.S. Patent No. 8,458,184 to Dorogusker et al. ("Dorogusker") in the Office Action dated March 23, 2016. (Office Action at 11.) Claims 11-14, 26, and 38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over AARTS in view of Dorogusker and further in view of U.S. Patent Application Publication No. 2007/0223523 to Montpetit et al. ("Montpetit"). (Office Action at 50.) The Advisory Action dated August 16, 2016 and the Pre-Appeal Conference Decision dated November 9, 2016 maintained the rejections. (Advisory Action at 2; Pre-Appeal Conference Decision at 2.) Applicant respectfully submits the claims are patentable.

I. Rejection under 35 USC § 103(a) over U.S. Patent Application Publication No. 2008/0256216 to AARTS ("AARTS") in view of U.S. Patent No. 8,458,184 to Dorogusker et al. ("Dorogusker")

Claims 1, 2, 4-6, 8-10, 15-19, 21, 24, 25, 27-37 and 39-41 were rejected under 35 USC § 103(a) over AARTS in view of Dorogusker.

A. Claim 1

Applicant submits that Dorogusker, alone or in combination with AART, does not disclose all of the features of claim 1. For example, claim 1 states an application server system comprises a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data via the one or more connection control servers to the user equipment which has transmitted the content delivery request. The first transmitter is configured to, ***when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information*** via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being information containing the main content identification information contained in the content delivery

request and the selected sub content specification information, and the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

Even assuming for the sake of argument that Dorogusker discloses transmission of play-list information, Dorogusker fails to disclose or even suggest a first transmitter is configured to, ***when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information***, much less the requirements of claim 1.

The Examiner acknowledges that AART does not cure the above deficiencies. *See* Office Action at 14.

Accordingly, Applicants submit that claim 1 is patentable for at least the reasons presented above.

B. Claims 2, 4-6, 8-10, and 24

Since claims 2, 4-6, 8-10, and 24 depend on claim 1, they are patentable at least based on their dependency.

C. Claims 15, 19, 21, 25, 27-29, 37, and 39-41

Claims 15, 19, 21, 25, 27-29, 37, and 39-41 contain features that are similar or analogous to those discussed in conjunction with claim 1. Therefore, Applicants submit that these claims are patentable for at least similar or analogous reasons.

D. Claims 16-18 and 30-36

Since claims 16-18 and 30-36 depend on claims 15 and 29, they are patentable at least based on their dependency.

II. Rejection under 35 USC § 103(a) over AARTS in view of Dorogusker and further in view of U.S. Patent Application Publication No. 2007/0223523 to Montpetit et al. ("Montpetit")

Claims 11-14, 26, and 38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over AARTS in view of Dorogusker and further in view of Montpetit.

A. Claims 11, 26, and 38

Claims 11, 26, and 38 contain features that are similar or analogous to those discussed in conjunction with claim 1, and since Montpetit does not cure the deficient teachings of AARTS and Dorogusker with respect to claim 1, Applicant submits that claims 11, 26, and 38 are patentable for at least similar reasons.

B. Claims 12-14

Since claims 12-14 depend upon claim 11, and since the Montpetit does not cure the deficient teachings of AARTS and Dorogusker with respect to claim 11, claims 12-14 are patentable at least based on their dependency.

III. Conclusion

Applicant believes the pending application is in condition for allowance.

In the event the U.S. Patent and Trademark Office determines that an extension is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 08-0219 referencing docket no. 2207946.00141US1.

Applicant believes no other fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-0219, under Order No. 2207946.00141US1 from which the undersigned is authorized to draw.

Respectfully submitted,

Dated: December 9, 2016

/Michael Smith/

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AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A content delivery system comprising an application server system and one or more connection control servers,

the one or more connection control servers being configured to receive equipment specification information transmitted by a user equipment and establish a connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a memory for storing sub content data representing sub content and main content data representing main content;

a first receiver for receiving a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

a processor for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content; and

a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data via the one or more connection control servers to the user equipment which has transmitted the content delivery request, wherein the first transmitter is configured to ~~transmit~~, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being ~~which is~~ information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and ~~is~~ the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a second receiver for receiving main content data and sub content data transmitted by the application server system and output, based on the received

main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

2. (Previously Presented) The content delivery system according to claim 1, wherein:

the user equipment comprises:

a third receiver for receiving the selected sub content specification information transmitted by the application server system; and

a second transmitter for transmitting, to the application server system, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the one or more connection control servers, and

the application server system comprises a fourth receiver for receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by the main content identification information contained in the received main content viewing request to the user equipment, and for receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by the selected sub content specification information contained in the received sub content viewing request to the user equipment.

3. (Canceled)

4. (Previously Presented) The content delivery system according to claim 1, wherein:

the third receiver is configured to receive the play-list information transmitted by the application server system; and

the second transmitter is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information.

5. (Previously Presented) The content delivery system according to claim 1, wherein:

the memory is configured to store the sub content data in association with attribute

information representing an attribute of sub content represented by the sub content data;

the selection information contains user basic information that is information for specifying the attribute information and is information associated with user identification information for identifying a user of the user equipment; and

the processor is configured to select sub content data stored in association with the attribute information specified by the user basic information associated with the user identification information for identifying the user of the user equipment which has transmitted the content delivery request.

6. (Previously Presented) The content delivery system according to claim 1, wherein:

the memory is configured to store the sub content data in association with attribute information representing an attribute of the sub content represented by the sub content data;

the selection information contains content basic information that is information for specifying the attribute information and is information associated with the main content identification information for identifying the main content; and

the processor is configured to select sub content data stored in association with the attribute information specified by the content basic information associated with the main content identification information contained in the received content delivery request.

7. (Canceled)

8. (Previously Presented) The content delivery system according to claim 1, wherein

the one or more connection control servers is configured to establish the connection by exchanging a predetermined connection establishment message with each of the user equipment and the application server system; and

the first transmitter is configured to transmit the selected sub content specification information to the user equipment via the one or more connection control servers by incorporating the selected sub content specification information in the connection establishment message.

9. (Previously Presented) The content delivery system according to claim 1, wherein:

the application server system comprises a service control server and a media server; and

the service control server comprises the memory for storing sub content data, the first receiver for receiving the content delivery request, and the first transmitter for transmitting the selected sub content specification information.

10. (Previously Presented) The content delivery system according to claim 1, wherein:

the application server system comprises a service control server and a media server;

the service control server comprises the memory for storing sub content data;

the media server comprises the memory, the processor, and the first transmitter;

the service control server further comprises a third transmitter for transmitting the selection information to the media server via the one or more connection control servers;

the media server further comprises a fifth receiver for receiving the selection information transmitted by the service control server; and

the processor is configured to select the sub content data based on the received selection information.

11. (Currently Amended) A content delivery system comprising an application server system and one or more connection control servers,

the one or more connection control servers comprising a sixth receiver for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a forth transmitter for transmitting content data representing content to the user equipment with which connection is established by the sixth receiver;

a controller for controlling a service provided by the forth transmitter; and

a second memory for storing profile information of a user of the user equipment,

the forth transmitter comprising a memory for storing sub content data representing sub

content and main content data representing main content,

the controller comprising:

a first receiver for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the sixth receiver; and

an processor for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content and preliminarily stored by the user profile server functions part, the controller or the one or more connection control servers; and

a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data via the sixth receiver to the user equipment which has transmitted the content delivery request, wherein the first transmitter is configured to ~~transmit~~, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the sixth receiver to the user equipment which has transmitted the content delivery request, the play-list information being ~~that is~~ information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and ~~is~~ the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

12. (Previously Presented) The content delivery system according to claim 11, wherein:

the user equipment comprises:

a third receiver for receiving the selected sub content specification information

transmitted by the controller; and

a second transmitter for transmitting, to the forth transmitter, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information, when connection with the forth transmitter is established by the sixth receiver, and

the forth transmitter comprises a fourth receiver for receiving the main content viewing request transmitted by the user equipment and transmitting to the user equipment main content data identified by the main content identification information contained in the received main content viewing request, and for receiving the sub content viewing request transmitted by the user equipment and transmitting to the user equipment sub content data specified by the selected sub content specification information contained in the received sub content viewing request.

13. (Previously Presented) The content delivery system according to claim 11, wherein the user equipment comprises a–second receiver for receiving main content data and sub content data transmitted by the forth transmitter, and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

14. (Previously Presented) The content delivery system according to claim 11, wherein

the third receiver is configured to receive the play-list information transmitted by the controller; and

the second transmitter is configured to transmit the main content viewing request and the sub content viewing request to the forth transmitter, based on the received play-list information.

15. (Currently Amended) A content delivery method comprising:

receiving equipment specification information transmitted by user equipment and establishing connection between an application server system and the user equipment based on the received equipment specification information, by one or more connection control servers;

receiving a content delivery request containing main content identification information for

identifying main content and transmitted by the user equipment, by the application server system;

selecting sub content data stored in a storing device for storing sub content data representing sub content and main content data representing main content, based on selection information containing attribute information representing an attribute of sub content;

transmitting selected sub content specification information specifying the selected sub content data via the one or more connection control servers to the user equipment which has transmitted the content delivery request, by the application server system; and

~~transmitting,~~ when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmitting the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being ~~that is~~ information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and ~~is~~ the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output, by the application server system,

wherein the user equipment comprises a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

16. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the selected sub content specification information transmitted by the application server system, by the user equipment;

transmitting, to the application server system, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information, by the user equipment, when connection between the user equipment and the application server system is established by the one or more connection

control servers; and

receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by main content identification information contained in the received main content viewing request to the user equipment, and receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by selected sub content specification information contained in the received sub content viewing request to the user equipment, by the application server system.

17. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the main content data and the sub content data transmitted by the application server system, and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data, by the user equipment.

18. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the play-list information transmitted by the application server system, by the user equipment; and

transmitting the main content viewing request and the sub content viewing request to the application server system based on the received play-list information, by the user equipment.

19. (Currently Amended) A service control server comprising:

a first receiver for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via a one or more connection control servers establishing connection between a media server and the user equipment;

an processor for selecting sub content data preliminarily stored in a storing device, based on selection information containing attribute information representing an attribute of sub content; and

a first transmitter for transmitting selected sub content specification information specifying the selected sub content data via the one or more connection control servers to the user equipment which has transmitted the content delivery request, wherein

the first transmitter is configured to ~~transmit~~, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being ~~that is~~ information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and ~~is~~ the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

20. (Canceled)

21. (Currently amended) A user equipment comprising:

a third receiver for receiving selected sub content specification information selected based on selection information containing attribute information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application server system, via a one or more connection control servers establishing connection between the application server system and the user equipment, wherein the third receiver is configured to, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, receive the play-list information transmitted by the application server system, via the one or more connection control servers to the user equipment which has transmitted the content delivery request, wherein the play-list information being ~~that is~~ information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and ~~is~~ the play-list information being information containing information

indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output;

a second transmitter for transmitting, to the application server system, a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the one or more connection control servers, wherein the second transmitter is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information; and

a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

22. (Canceled)

23. (Canceled)

24. (Previously Presented) The content delivery system according to claim 1, wherein the sub content is advertisement content.

25. (Currently Amended) A content delivery system comprising an application server system and one or more connection control servers,

the one or more connection control servers being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information,

the application server system comprising:

a memory for storing sub content data representing sub content and main content data representing main content;

a first receiver for receiving, a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

a processor for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content; and

a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data via the one or more connection control servers to the user equipment which has transmitted the content delivery request, wherein the first transmitter is configured to ~~transmit~~, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, play-list information being ~~which is~~ information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and ~~is~~ the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

26. (Currently Amended) A content delivery system comprising an application server system and one or more connection control servers,

the one or more connection control servers comprising a sixth receiver for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a forth transmitter for transmitting content data representing content to the user equipment with which the connection is established by the sixth receiver;

a controller for controlling a service provided by the forth transmitter; and

a second memory for storing profile information of a user of the user equipment,

the forth transmitter comprising a memory for storing sub content data representing sub content and main content data representing main content,

the controller comprising:

a first receiver for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the sixth receiver; and

a processor for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content and preliminarily stored by the user profile server functions part, the controller or the one or more connection control servers; and

a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data, via the sixth receiver to the user equipment which has transmitted the content delivery request, wherein the first transmitter is configured to ~~transmit~~, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the sixth receiver to the user equipment which has transmitted the content delivery request, play-list information being ~~that is~~ information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and ~~is~~ the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received

main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

27. (Currently Amended) A service control server comprising:

a first receiver for receiving a content delivery request containing main content identification information for identifying main content and transmitted by user equipment, via a one or more connection control servers establishing connection between a media server and the user equipment;

a processor for selecting sub content data preliminarily stored in a storing device based on selection information containing attribute information representing an attribute of sub content; and

a first transmitter for transmitting selected sub content specification information specifying the selected sub content data, via the one or more connection control servers to the user equipment which has transmitted the content delivery request, wherein the first transmitter is configured to ~~transmit~~, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being ~~which is~~ information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and ~~is~~ the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

28. (Currently Amended) A user equipment comprising:

a third receiver for receiving selected sub content specification information selected based on selection information containing attribute information representing an attribute of sub content

and which is information for specifying selected sub content data and transmitted by an application server system, via one or more connection control servers establishing connection between the application server system and the user equipment, wherein the third receiver is configured to, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, receive the play-list information transmitted by the application server system, via the one or more connection control servers to the user equipment which has transmitted the content delivery request, wherein the play-list information being ~~that is~~ information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and ~~is~~ the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output;

a second transmitter for transmitting, to the application server system, a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information, when connection with the application server system is established by the one or more connection control servers, wherein the a second transmitter is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information; and

a second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

29. (Currently Amended) A server comprising:

a memory; and

one or more processors, wherein the one or more processors are configured to:

store a plurality of sub content data and a plurality of main content data, wherein each of the

plurality of sub content data is associated with one or more sub content attributes;

receive a content delivery request from a user device, wherein the content delivery request identifies first main content data of the plurality of main content data;

select at least first sub content data and second sub content data from the plurality of sub content data based on the first sub content data and the second sub content data being associated with at least a particular attribute of the sub content attributes;

transmit a first choice option corresponding to the first sub content data and a second choice option corresponding to the second sub content data to the user device; and

transmit play-list information to the user device via a connection established by one or more connection control servers when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process to establish a connection, wherein the play-list information identifies the main content, the first sub content data, the second sub content data, and a sequence in which the main content, the first sub content data, the second sub content data are to be output,

wherein the user device comprises a-second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

30. (Previously Presented) The server according to claim 29, wherein the one or more processors are further configured to:

receive a sub content viewing request from the user device, wherein the sub content viewing request contains a selected choice corresponding to either the first choice option or the second choice option;

transmit the first sub content data to the user device as selected sub content data if the selected choice corresponds to the first choice option;

transmit the second sub content data to the user device as the selected sub content data if the selected choice corresponds to the second choice option; and

transmit the first main content data identified by the content delivery request to the user

device.

31. (Previously Presented) The server according to claim 30, wherein a user inputs a selection command to the user device to select the first choice option or the second choice option as the selected choice.

32. (Previously Presented) The server according to claim 30, wherein one or more processors are further configured to:

transmit the first main content data and the selected sub content data to the user device for viewing on the user device.

33. (Previously Presented) The server according to claim 29, wherein the content delivery request from the user device contains user information about a user of the user device, and

wherein the one or more processors are further configured to select the first sub content data and the second sub content data when the particular attribute corresponds to the user information.

34. (Previously Presented) The server according to claim 30, wherein the content delivery request from the user device contains user information about a user of the user device, and

wherein the one or more processors are further configured to select the first sub content data and the second sub content data when the particular attribute corresponds to the user information.

35. (Previously Presented) The server according to claim 29, wherein the one or more processors are further configured to:

associate each of the plurality of main content data with one or more main content attributes;

select the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content.

36. (Previously Presented) The server according to claim 30, wherein the one or more processors are further configured to:

associate each of the plurality of main content data with one or more main content attributes;

select the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content.

37. (Currently Amended) A content delivery system comprising an application server system and one or more connection control servers,

the one or more connection control servers being configured to receive user identification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received user identification information,

the application server system comprising:

a first receiver for receiving a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content, via the one or more connection control servers;

a processor for selecting the sub content data based on user basic information or the main content identification information, the user basic information being associated with the user identification information for identifying a user of the user equipment having transmitted the content delivery request, and the main content identification information being contained by the content delivery request; and

a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data via the one or more connection control servers to the user equipment which has transmitted the content delivery request, wherein the first transmitter is configured to ~~transmit~~, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being ~~which is~~ information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and ~~is~~ the play-list information being information containing information indicating a sequence in which

the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

38. (Currently Amended) A content delivery system comprising an application server system and one or more connection control servers,

the one or more connection control servers comprising a sixth receiver for receiving user identification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received user identification information,

the application server system comprising:

a forth transmitter for transmitting content data representing content to the user equipment with which connection is established by the sixth receiver;

a controller for controlling a service provided by the forth transmitter; and

a second memory for storing profile information of a user of the user equipment, and

the controller comprising:

a first receiver for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the sixth receiver; and

a processor for selecting sub content data based on user basic information or the main content identification information, the user basic information being associated with the user identification information for identifying a user of the user equipment having transmitted the content delivery request, and the main content identification information being contained by the content delivery request; and

a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data via the sixth receiver to the user equipment which has transmitted the content delivery request, wherein the first transmitter is configured to ~~transmit~~, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the sixth receiver to the user equipment which has transmitted

the content delivery request, the play-list information being ~~that is~~ information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and ~~is~~ the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

39. (Currently Amended) A content delivery method comprising:

receiving user identification information transmitted by user equipment and establishing connection between an application server system and the user equipment based on the received user identification information, by one or more connection control servers;

receiving a content delivery request containing main content identification information for identifying main content and transmitted by the user equipment, via the one or more connection control servers, by the application server system;

selecting sub content data representing sub content based on user basic information or the main content identification information, the user basic information being associated with the user identification information for identifying a user of the user equipment having transmitted the content delivery request, and the main content identification information being contained by the content delivery request; and

~~transmitting,~~ when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmitting the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being ~~that is~~ information containing the main content identification information contained in the content delivery request and selected sub content specification information specifying the selected sub content data, and ~~is~~ the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output, by the application server system.

40. (Currently Amended) A non-transitory computer-readable medium storing a program comprising instructions for causing a service control server to realize:

a first receiver for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via one or more connection control servers establishing connection between a media server and the user equipment;

a processor for selecting sub content data based on content basic information associated with the main content identification information contained by the content delivery request; and

a first transmitter for transmitting selected sub content specification information specifying the selected sub content data via the one or more connection control servers to the user equipment which has transmitted the content delivery request, wherein the first transmitter for ~~transmitting~~, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmitting the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being ~~that is~~ information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and ~~is~~ the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

41. (Currently Amended) A service control server comprising:

a first receiver for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via one or more connection control servers establishing connection between a media server and the user equipment;

a processor for selecting sub content data based on content basic information associated with the main content identification information contained by the content delivery request; and

a first transmitter for transmitting selected sub content specification information specifying the selected sub content data via the one or more connection control servers to the user equipment

which has transmitted the content delivery request, wherein the first transmitter is configured to ~~transmit~~, when the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data as a process for establishing the connection, transmit the play-list information via the one or more connection control servers to the user equipment which has transmitted the content delivery request, the play-list information being ~~that is~~ information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and ~~is~~ the play-list information being information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

Docket No.: 2207946.00141US1
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Kunihiro Taniguchi	Confirmation No.:	1971
Application No.:	13/129,756	Art Unit:	2463
Filed:	May 17, 2011	Examiner:	N. Pascual Peguero
Title:	CONTENT DELIVERY SYSTEM		

AMENDMENT IN RESPONSE TO NOTICE OF PANEL DECISION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

INTRODUCTORY COMMENTS

In response to the Notice of Panel Decision dated November 9, 2016, please amend the above-identified U.S. patent application as follows. Applicant submits herewith a request for continued examination (RCE).

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

Remarks/Arguments begin on page 23 of this paper.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/129,756	Filing Date 05/17/2011	☐ To be Mailed

ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) 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), (i), 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 $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ 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

AMENDMENT **12/09/2016**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 36	Minus	** 41	= 0	X $80 =	0
Independent (37 CFR 1.16(h))	* 15	Minus	***15	= 0	X $420 =	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

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
☐ 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.
** 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 number found in the appropriate box in column 1.

LIE
JEFFERY L. OLSEN

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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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/129,756	05/17/2011	Kunihiro Taniguchi	J-11-0248	1971

71799 7590 11/09/2016

Mr. Ryoichi Harada
2100 Pennsylvania Ave., NW
SUITE 560
Washington, DC 20037-3213

EXAMINER	
PASCUAL PEGUERO, NATALI	

ART UNIT	PAPER NUMBER
2463	

MAIL DATE	DELIVERY MODE
11/09/2016	PAPER

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 Panel Decision from Pre-Appeal Brief Review	Application No. 13/129,756	Applicant(s) TANIGUCHI ET AL.
	Examiner NATALI N. PASCUAL PEGUERO	Art Unit 2463

This is in response to the Pre-Appeal Brief Request for Review filed 23 September, 2016.

1. ☐ **Improper Request** – The Request is improper and a conference will not be held for the following reason(s):

☐ The Notice of Appeal has not been filed concurrent with the Pre-Appeal Brief Request.
☐ The request does not include reasons why a review is appropriate.
☐ A proposed amendment is included with the Pre-Appeal Brief request.
☐ Other: .

The time period for filing a response continues to run from the receipt date of the Notice of Appeal or from the mail date of the last Office communication, if no Notice of Appeal has been received.

2. ☒ **Proceed to Board of Patent Appeals and Interferences** – A Pre-Appeal Brief conference has been held. The application remains under appeal because there is at least one actual issue for appeal. Applicant is required to submit an appeal brief in accordance with 37 CFR 41.37. The time period for filing an appeal brief will be reset to be one month from mailing this decision, or the balance of the two-month time period running from the receipt of the notice of appeal, whichever is greater. Further, the time period for filing of the appeal brief is extendible under 37 CFR 1.136 based upon the mail date of this decision or the receipt date of the notice of appeal, as applicable.

☒ The panel has determined the status of the claim(s) is as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: *1,2,4-6,8-19,21 and 24-41*.
Claim(s) withdrawn from consideration: _____.

3. ☐ **Allowable application** – A conference has been held. The rejection is withdrawn and a Notice of Allowance will be mailed. Prosecution on the merits remains closed. No further action is required by applicant at this time.

4. ☐ **Reopen Prosecution** – A conference has been held. The rejection is withdrawn and a new Office action will be mailed. No further action is required by applicant at this time.

All participants:

(1) *NATALI N. PASCUAL PEGUERO*.	(3) *MARK RINEHART*.
(2) *Mang Hang Yeung*.	(4)_____.

/NATALI N PASCUAL PEGUERO/ Examiner, Art Unit 2463	/MANG YEUNG/ Primary Examiner, Art Unit 2463	/MARK RINEHART/ Supervisory Patent Examiner, Art Unit 2463

Doc Code: AP.PRE.REQ

USED IN LIEU OF PTO/SB/33 (07-09)

PRE-APPEAL BRIEF REQUEST FOR REVIEW	Docket Number (Optional) 2207946.00141US1	
	Application Number 13/129,756-Conf. #1971	Filed May 17, 2011
	First Named Inventor Kunihiro TANIGUCHI	
	Art Unit 2463	Examiner N. P. Peguero

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

- [ ] applicant /inventor.
- [ ] assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)
- [ ] attorney or agent of record. Registration number _____.
- [x] attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 71,190

/Michael Smith/
Signature

Michael H. Smith
Typed or printed name

(202) 663-6000
Telephone number

September 23, 2016
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

- [ ] *Total of 1 forms are submitted.

NOTICE OF APPEAL FROM THE EXAMINER TO THE PATENT TRIAL AND APPEAL BOARD	Docket Number (Optional) 2207946.00141US1

In re Application of
Kunihiro TANIGUCHI

Application Number	Filed
13/129,756-Conf. #1971	May 17, 2011

For CONTENT DELIVERY SYSTEM

Art Unit	Examiner
2463	N. P. Peguero

Applicant hereby **appeals** to the Patent Trial and Appeal Board from the last decision of the examiner.

The fee for this Notice of Appeal is (37 CFR 41.20(b)(1)) $ 800.00

☐ Applicant claims small entity status. See 37 CFR 1.27. Therefore, the fee shown above is reduced by half, and the resulting fee is: $ _____

☐ A check in the amount of the fee is enclosed.

☒ Payment by credit card. Form ~~PTO-2038 is attached~~.

☒ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 08-0219 .

☒ A petition for an extension of time under 37 CFR 1.136(a) (PTO/SB/22) is enclosed.

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.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

☐ attorney or agent of record.
Registration number _____.

☒ attorney or agent acting under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34. 71,190

/Michael Smith/
Signature

Michael H. Smith
Typed or printed name

(202) 663-6000
Telephone number

September 23, 2016
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☐ *Total of 1 forms are submitted.

PTO/SB/22 (03-13)
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PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)	Docket Number (Optional) 2207946.00141US1
Application Number 13/129,756-Conf. #1971	Filed May 17, 2011
For CONTENT DELIVERY SYSTEM	
Art Unit 2463	Examiner N. P. Peguero

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

	Fee	Small Entity Fee	Micro Entity Fee	
☐ One month (37 CFR 1.17(a)(1))	$200	$100	$50	$
☐ Two months (37 CFR 1.17(a)(2))	$600	$300	$150	$
☒ Three months (37 CFR 1.17(a)(3))	$1,400	$700	$350	$ 1,400.00
☐ Four months (37 CFR 1.17(a)(4))	$2,200	$1,100	$550	$
☐ Five months (37 CFR 1.17(a)(5))	$3,000	$1,500	$750	$

☐ Applicant asserts small entity status. See 37 CFR 1.27.

☐ Applicant certifies micro entity status. See 37 CFR 1.29.
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

☐ A check in the amount of the fee is enclosed.

☒ Payment by credit card. ~~Form PTO-2038 is attached.~~

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☒ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 08-0219 .

☒ Payment made via 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.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest. See 37 CFR 3.71. 37 CFR 3.73(b) statement is enclosed (Form PTO/SB/96).

☐ attorney or agent of record. Registration number _____ .

☒ attorney or agent acting under 37 CFR 1.34. Registration number 71,190 .

/Michael Smith/	September 23, 2016
Signature	Date
Michael H. Smith	(202) 663-6000
Typed or printed name	Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

☐ * Total of 1 forms are submitted.

Docket No.: 2207946.00141US1
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Kunihiro Taniguchi	Confirmation No.:	1971
Application No.:	13/129,756	Art Unit:	2463
Filed:	May 17, 2011	Examiner:	N. P. Peguero
Title:	CONTENT DELIVERY SYSTEM		

PRE-APPEAL BRIEF CONFERENCE REQUEST

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

INTRODUCTORY COMMENTS

I. Introduction

The Present Application relates to a content delivery system. (Published Application at [0001]). In related art content delivery systems, the content delivery system cannot change the advertisement content inserted into the main content according to the user's desired content and/or the user who views the content. (*Id.* at [0007].) As such, the content delivery system is not able to cause a user to view the user's desired content and/or advertisement content selected according to the user. (*Id.*) It is an object of the present invention to provide a content delivery system capable of solving the problem that it is impossible to cause a user to view the user's desired content and/or advertisement content selected according to the user. (*Id.* at [0008].)

Claim 1 recites:

> A content delivery system comprising an application server system and one or more connection control servers,

the one or more connection control servers being configured to receive equipment specification information transmitted by a user equipment and establish a connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a memory for storing sub content data representing sub content and main content data representing main content;

a first receiver for receiving a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

a processor for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content; and

a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data via the one or more connection control servers to the user equipment which has transmitted the content delivery request, wherein the first transmitter is configured to ***transmit, when the one or more connection control servers executes a process for establishing the connection***, via the one or more connection control servers to the user equipment which has transmitted the content delivery request, ***play-list information*** which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a second receiver for receiving main content data and sub content data transmitted by the application server system and output, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

II. Rejection

A. Status of Claims 1, 2, 4-6, 8-19, 21, and 24-41

Claims 1, 2, 4-6, 8-10, 15-19, 21, 24, 25, 27-37 and 39-41 were rejected under 35 USC § 103(a) over U.S. Patent Application Publication No. 2008/0256216 to AARTS ("AARTS") in view of U.S. Patent No. 8,458,184 to Dorogusker et al. ("Dorogusker"). (Office Action at 11.) Claims

11-14, 26, and 38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over AARTS in view of Dorogusker and further in view of U.S. Patent Application Publication No. 2007/0223523 to Montpetit et al. ("Montpetit"). (Office Action at 50.) The Advisory Action maintained the rejections. (Advisory Action at 2.)

B. AARTS, Dorogusker, and Montpetit

ARTS relates to a method of supplying advertising content. The method comprises the steps of receiving content data, the data comprising metadata identifying an advertisement service, transmitting a data request to the advertisement service in accordance with the metadata, transmitting an authentication request to an authentication server, receiving an authentication response, the authentication response comprising user information, and transmitting advertisement information in accordance with the user information. (AARTS at Abstract.)

Dorogusker relates to tagging media assets, locations, and advertisements. According to Dorogusker, an accessory communicates with a PMD to store tags associated with broadcasts in a file maintained in a storage medium of the accessory. (Dorogusker at Abstract.)

Montpetit relates to customization of network services and applications. According to Montpetit, a communication system is provided that ensures that a rich variety and complexity of network offerings may be experienced by users without overloading terminals and clients by offering user-centric network services. (Montpetit at Abstract.)

C. Rejection under 35 USC § 103(a)

1. Claim 1

Applicant submits that Dorogusker, alone or in combination with AART, does not disclose all of the features of claim 1. For example, claim 1 states an application server system comprises a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data via the one or more connection control servers to the user equipment which has transmitted the content delivery request. The first transmitter is configured to ***transmit, when the one or more connection control servers executes a process for establishing the***

connection, via the one or more connection control servers to the user equipment which has transmitted the content delivery request, ***play-list information*** which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output. In other words, claim 1 states that the first transmitter configured to ***transmit play-list information when the one or more connection control servers executes a process for establishing the connection.***

The Examiner asserts that Dorogusker discloses this limitation. (*See* Office Action at 3-5; Advisory Action at 2.) Dorogusker merely describes automatically transmitting a tag after PMD is connected. (Dorogusker at 20:48-58.) In other words, according to Dorogusker, a tag is transmitted ***after execution of a connection process***, but ***a tag is not transmitted at the same time with connection***. (*See id.*) Dorogusker fails to disclose or even suggest a first transmitter is configured to ***transmit play-list information when the one or more connection control servers executes a process for establishing the connection***. Thus, in contrast to Dorogusker, in a non-limiting exemplary embodiment, the present system can perform the process of establishing a connection and transmitting play-list information together in order to deliver the playlist information to the user immediately when the connection is established, thereby improving the user experience. The Examiner acknowledges that AART does not cure the above deficiencies. (*See* Office Action at 14.)

Accordingly, Applicants submit that claim 1 is patentable for at least the reasons presented above. Since claims 2, 4-6, 8-10, and 24 depend on claim 1, they are patentable at least based on their dependency. Claims 15, 19, 21, 25, 27-29, 37, and 39-41 contain features that are similar or analogous to those discussed in conjunction with claim 1, and therefore are patentable for at least similar or analogous reasons. Since claims 16-18 and 30-36 depend on claims 15 and 29, they are patentable at least based on their dependency. Claims 11, 26, and 38 contain features that are similar or analogous to those discussed in conjunction with claim 1, and since Montpetit does not cure the deficient teachings of AARTS and Dorogusker with respect to claim 1, Applicant submits

that claims 11, 26, and 38 are patentable for at least similar reasons. Since claims 12-14 depend upon claim 11, and since the Montpetit does not cure the deficient teachings of AARTS and Dorogusker with respect to claim 11, claims 12-14 are patentable at least based on their dependency.

III. Conclusion

It is believed that all the pending claims have been addressed in this paper. However, failure to address a specific rejection, issue or comment, does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above are not intended to be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed.

In the event the U.S. Patent and Trademark Office determines that an extension is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 08-0219 referencing docket no. 2207946.00141US1.

Applicant believes no other fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-0219, under Order No. 2207946.00141US1 from which the undersigned is authorized to draw.

Respectfully submitted,

Dated: September 23, 2016

/Michael Smith/

Michael H. Smith
Registration No.: 71,190
Attorney for Applicant(s)

Wilmer Cutler Pickering Hale and Dorr LLP
1875 Pennsylvania Avenue, NW
Washington, DC 20006
(202) 663-6000 (telephone)
(202) 663-6363 (facsimile)

Electronic Patent Application Fee Transmittal

Application Number:	13129756
Filing Date:	17-May-2011
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Filer:	Michael Hal Smith/Marlaine Williams
Attorney Docket Number:	J-11-0248

Filed as Large Entity

Filing Fees for U.S. National Stage under 35 USC 371

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
NOTICE OF APPEAL	1401	1	800	800
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Extension - 3 months with $0 paid	1253	1	1400	1400
Miscellaneous:				
			Total in USD ($)	**2200**

Electronic Acknowledgement Receipt

EFS ID:	27018745
Application Number:	13129756
International Application Number:	
Confirmation Number:	1971
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Customer Number:	71799
Filer:	Michael Hal Smith/Marlaine Williams
Filer Authorized By:	Michael Hal Smith
Attorney Docket Number:	J-11-0248
Receipt Date:	23-SEP-2016
Filing Date:	17-MAY-2011
Time Stamp:	19:13:57
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$2200
RAM confirmation Number	092616INTEFSW19152400
Deposit Account	080219
Authorized User	Marlaine Williams

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

37 CFR 1.17 (Patent application and reexamination processing fees)

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

37 CFR 1.492 (National application filing, search, and examination fees)

37 CFR 1.492(a) (Basic national fee only)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Pre-Brief Conference request	2207946_00141_US1_Pre-Appeal_Brief_Request_For_Review_Form.PDF	70629 5a7043293b57988aff220b7ef84573a272c992c2	no	1
Warnings:					
Information:					
2	Notice of Appeal Filed	2207946_00141_US1_Notice_Of_Appeal.PDF	62991 8b3c2fd3e6e041180af947d1cf7c0f2b6ce5205c	no	1
Warnings:					
Information:					
3	Extension of Time	2207946_00141_US1_Petition_For_Extension_Of_Time.PDF	76897 2c64904b9e873a93e14b30c712aba2d12fd851db	no	1
Warnings:					
Information:					
4	Pre-Brief Conference request	2207946_00141_US1_Pre-Appeal_Brief_Conference_Request.PDF	146142 70075b15fb3b1d326fa28bfe951cb5b33cae0a7a	no	5
Warnings:					
Information:					
5	Fee Worksheet (SB06)	fee-info.pdf	32479 628fbdda30c1f798ee349c12cdde06cefc8d444f	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	389138		

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.

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.
13/129,756	05/17/2011	Kunihiro Taniguchi	J-11-0248	1971

71799 7590 08/16/2016

Mr. Ryoichi Harada
2100 Pennsylvania Ave., NW
SUITE 560
Washington, DC 20037-3213

EXAMINER
PASCUAL PEGUERO, NATALI

ART UNIT	PAPER NUMBER
2463	

NOTIFICATION DATE	DELIVERY MODE
08/16/2016	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):

necipca@necam.com
kanako.miyazawa@necam.com

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 13/129,756	**Applicant(s)** TANIGUCHI ET AL.	
	Examiner NATALI N. PASCUAL PEGUERO	**Art Unit** 2463	**AIA (First Inventor to File) Status** No

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

THE REPLY FILED 25 July 2016 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

NO NOTICE OF APPEAL FILED

1. ☒ The reply was filed after a final rejection. No Notice of Appeal has been filed. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance;

(2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114 if this is a utility or plant application. Note that RCEs are not permitted in design applications. The reply must be filed within one of the following time periods:

a) ☒ The period for reply expires *3* months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action; or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

c) ☐ A prior Advisory Action was mailed more than 3 months after the mailing date of the final rejection in response to a first after-final reply filed within 2 months of the mailing date of the final rejection. The current period for reply expires months from the mailing date of *the prior Advisory Action* or SIX MONTHS from the mailing date of the final rejection, whichever is earlier.

Examiner Note: If box 1 is checked, check either box (a), (b) or (c). ONLY CHECK BOX (b) WHEN THIS ADVISORY ACTION IS THE FIRST RESPONSE TO APPLICANT'S FIRST AFTER-FINAL REPLY WHICH WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. ONLY CHECK BOX (c) IN THE LIMITED SITUATION SET FORTH UNDER BOX (c). See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) or (c) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendments filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   b) ☐ They raise the issue of new matter (see NOTE below);
   c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): (a) ☐ will not be entered, or (b) ☒ will be entered, and an explanation of how the new or amended claims would be rejected is provided below or appended.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

9. ☐ The affidavit or other evidence filed after final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

10. ☐ The affidavit or other evidence filed after the date of filing the Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

11. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

12. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.

13. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____

14. ☐ Other: _____.

STATUS OF CLAIMS

15. The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: .
Claim(s) objected to: .
Claim(s) rejected: 1,2,4-6,8-19,21 and 24-41.
Claim(s) withdrawn from consideration: .

/NATALI N PASCUAL PEGUERO/ Examiner, Art Unit 2463	/MANG YEUNG/ Primary Examiner, Art Unit 2463

Continuation of 12. does NOT place the application in condition for allowance because:

The 35 U.S.C. 112(b) rejection to Claims 1, 2, 4-6, 8-19, 21, 24-38, 40 and 41 are withdrawn based on applicant's amendment.

With respect to rejections for claim 1 under 35 USC 103:
The applicant presented arguments on pages 33-35 that Dorogusker, alone or in combination with AARTS fails to show certain features of applicant's invention, for example, "wherein the first transmitter is configured to transmit, when the one or more connection control servers executes a process for establishing the connection, via the one or more connection control servers to the user equipment which has transmitted the content delivery request, play-list information".

The examiner respectfully disagrees with the arguments presented by the applicant. Dorogusker teaches "wherein the first transmitter is configured to transmit, when the one or more connection control servers executes a process for establishing the connection," [(Col. 10, lines 38-41), PMD 190 can be adapted to connect to a data network, e.g., via wired or wireless connection (not explicitly shown in FIG. 1F)… (Col. 20, lines 48-53), The transfer of tags from receiver 1208 to PMD 1212 and the transfer of tags from PMD 1212 to host computer 1214 can be fully automated; that is, receiver 1208 can automatically detect when PMD 1212 is connected thereto and can automatically transfers the tags (including any accumulated tags) whenever a connection is detected] "via the one or more connection control servers to the user equipment which has transmitted the content delivery request," [(See Abstract), Each time the user requests a new tag, the accessory generates a tag containing information descriptive of the broadcast material (e.g., song title, artist, radio station identifier, time of tagging, etc.) and writes the tag to the tag file using a write command to the PMD] "play-list information" [(Col. 20, lines 41-44), After receiving the user's tags from receiver 1208, PMD 1212 can be connected to host computer 1214. Host computer 1214 can read the stored tags from PMD 1212 and produce a list (e.g., a item list or playlist) of the user's tagged content].

It has been shown that Dorogusker clearly teaches the above limitations, and therefore the rejection is maintained.

With respect to rejections for claims 2, 4-6, 8-10 and 24 under 35 USC 103:
The applicant's arguments have been fully considered but they are not persuasive. The teachings in the references clearly address the limitations in claim 1, and therefore the rejection with respect to claims 2, 4-6, 8-10 and 24 are maintained.

With respect to rejections for claims 15, 19, 21, 25, 27-29, 37 and 39-41 under 35 USC 103:
The applicant's arguments have been fully considered but they are not persuasive. The teachings in the references clearly address the limitations in claim 1, and therefore the rejection with respect to claims 15, 19, 21, 25, 27-29, 37 and 39-41 are maintained.

With respect to rejections for claims 16-18 and 30-36 under 35 USC 103:
The applicant's arguments have been fully considered but they are not persuasive. The teachings in the references clearly address the limitations in claims 15 and 29, and therefore the rejection with respect to claims 16-18 and 30-36 are maintained.

With respect to claims rejections for 11, 26 and 38 under 35 USC 103:
The applicant's arguments have been fully considered but they are not persuasive. Claims 11, 26 and 38 contains features that are similar or analogous to those discussed in claim 1. The teachings in the references clearly address the limitations in claim 1, and therefore the rejection with respect to claims 11, 26 and 38 are maintained.

With respect to rejections for claims 12-14 under 35 USC 103:
The applicant's arguments have been fully considered but they are not persuasive. The teachings in the references clearly address the limitations in claim 11, and therefore the rejection with respect to claims 12-14 are maintained.

OK TO ENTER: /N.P./

08/10/2016

Docket No.: 2207946.00141US1
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Kunihiro Taniguchi	Confirmation No.:	1971
Application No.:	13/129,756	Art Unit:	2463
Filed:	May 17, 2011	Examiner:	N. Pascual Peguero
Title:	CONTENT DELIVERY SYSTEM		

AMENDMENT AFTER FINAL ACTION UNDER 37 C.F.R. § 1.116

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

INTRODUCTORY COMMENTS

In response to the Office Action dated March 23, 2016, please amend the above-identified U.S. patent application as follows. Applicant submits herewith a petition for a one-month extension of time. Since July 23, 2016 falls on a Saturday, this response is timely filed with a one-month extension of time on Monday, July 25, 2016.

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

Remarks/Arguments begin on page 33 of this paper.

OK TO ENTER: /N.P./

08/10/2016

Docket No.: 2207946.00141US1
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Kunihiro Taniguchi	Confirmation No.:	1971
Application No.:	13/129,756	Art Unit:	2463
Filed:	May 17, 2011	Examiner:	N. Pascual Peguero
Title:	CONTENT DELIVERY SYSTEM		

AMENDMENT AFTER FINAL ACTION UNDER 37 C.F.R. § 1.116

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

INTRODUCTORY COMMENTS

In response to the Office Action dated March 23, 2016, please amend the above-identified U.S. patent application as follows. Applicant submits herewith a petition for a one-month extension of time. Since July 23, 2016 falls on a Saturday, this response is timely filed with a one-month extension of time on Monday, July 25, 2016.

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

Remarks/Arguments begin on page 33 of this paper.

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A content delivery system comprising an application server system and one or more connection control servers ~~a connection control system~~,

the one or more connection control servers ~~connection control system~~ being configured to receive equipment specification information transmitted by a user equipment and establish a connection between the application server system and the ~~this~~ user equipment based on the received equipment specification information,

the application server system comprising:

~~a content storage unit for storing~~ a memory for storing sub content data representing sub content and main content data representing main content;

~~a delivery request reception unit for receiving~~ a first receiver for receiving a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

~~a sub content selection unit for selecting~~ a processor for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content; and

~~a selected sub content specification information transmission unit for transmitting~~ a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data via the one or more connection control servers ~~connection control system~~ to the user equipment which has transmitted the content delivery request, wherein the first transmitter ~~selected sub content specification information transmission unit~~ is configured to

transmit, when the one or more connection control servers ~~connection control system~~ executes a process for establishing the connection, via the one or more connection control servers ~~connection control system~~ to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a ~~content outputting unit~~ second receiver for receiving main content data and sub content data transmitted by the application server system and output ~~outputting~~, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

2. (Currently Amended) The content delivery system according to claim 1, wherein:

the user equipment comprises:

a ~~selected sub content specification information reception unit~~ third receiver for receiving the selected sub content specification information transmitted by the application server system; and

a ~~content viewing request transmission unit~~ second transmitter for transmitting, to the application server system, a main content viewing request containing the main content identification

information and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the one or more connection control servers ~~connection control system~~, and

the application server system comprises a ~~content delivering unit~~ fourth receiver for receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by the main content identification information contained in the received main content viewing request to the user equipment, and for receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by the selected sub content specification information contained in the received sub content viewing request to the user equipment.

3. (Canceled)

4. (Currently Amended) The content delivery system according to claim 1, wherein:

the ~~selected sub content specification information reception unit~~ third receiver is configured to receive the play-list information transmitted by the application server system; and

the ~~content viewing request transmission unit~~ second transmitter is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information.

5. (Currently Amended) The content delivery system according to claim 1, wherein:

the ~~content storage unit~~ memory is configured to store the sub content data in association with attribute information representing an attribute of sub content represented by the sub content data;

the selection information contains user basic information that is information for specifying the attribute information and is information associated with user identification information for identifying a user of the user equipment; and

the ~~sub content selection unit~~ processor is configured to select sub content data stored in association with the attribute information specified by the user basic information associated with the user identification information for identifying the user of the user equipment which has transmitted the content delivery request.

6. (Currently Amended) The content delivery system according to claim 1, wherein:

the ~~content storage unit~~ memory is configured to store the sub content data in association with attribute information representing an attribute of the sub content represented by the sub content data;

the selection information contains content basic information that is information for specifying the attribute information and is information associated with the main content identification information for identifying the main content; and

the ~~sub content selection unit~~ processor is configured to select sub content data stored in association with the attribute information specified by the content basic information associated with the main content identification information contained in the received content delivery request.

7. (Canceled)

8. (Currently Amended) The content delivery system according to claim 1, wherein

the one or more connection control servers ~~connection control system~~ is configured to establish the connection by exchanging a predetermined connection establishment message with each of the user equipment and the application server system; and

the first transmitter ~~selected sub content specification information transmission unit~~ is configured to transmit the selected sub content specification information to the user equipment via the one or more connection control servers ~~connection control system~~ by incorporating the selected sub content specification information in the connection establishment message.

9. (Currently amended) The content delivery system according to claim 1, wherein:

the application server system comprises a service control server and a media server; and

the service control server comprises the memory for storing sub content data, the first receiver for receiving the content delivery request, and the first transmitter for transmitting the selected sub content specification information ~~the delivery request reception unit, the sub content selection unit, and the selected sub content specification information transmission unit~~.

10. (Currently Amended) The content delivery system according to claim 1, wherein:

the application server system comprises a service control server and a media server;

the service control server comprises the memory for storing sub content data ~~delivery request reception unit~~;

the media server comprises the ~~content storage unit~~ memory, the ~~sub-content selection unit~~ processor, and the first transmitter ~~selected sub-content specification information transmission unit~~;

the service control server further comprises ~~an selection information transmission unit~~ a third transmitter for transmitting the selection information to the media server via the one or more connection control servers ~~connection control system~~;

the media server further comprises ~~an selection information reception unit~~ a fifth receiver for receiving the selection information transmitted by the service control server; and

the ~~sub-content selection unit~~ processor is configured to select the sub content data based on the received selection information.

11. (Currently Amended) A content delivery system comprising an application server system and one or more connection control servers ~~a connection control system~~,

the one or more connection control servers ~~connection control system~~ comprising a ~~core IMS (Internet Protocol Multimedia Subsystem) part~~ sixth receiver for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a ~~media functions part~~ forth transmitter for transmitting content data representing

content to the user equipment with which connection is established by the ~~core IMS part~~ sixth receiver;

a ~~service control functions part~~ controller for controlling a service provided by the ~~media functions part~~ forth transmitter; and

a ~~user profile server functions part~~ second memory for storing profile information of a user of the user equipment,

the ~~media functions part~~ forth transmitter comprising a ~~content storage unit~~ memory for storing sub content data representing sub content and main content data representing main content,

the ~~service control functions part~~ controller comprising:

~~a delivery request reception unit~~ a first receiver for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the ~~core IMS part~~ sixth receiver; and

an ~~sub content selection unit~~ processor for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content and preliminarily stored by the user profile server functions part, the ~~service control functions part~~ controller or the one or more connection control servers ~~connection control system~~; and

a first transmitter ~~selected sub content specification information transmission unit~~ for transmitting selected sub content specification information for specifying the selected sub content data via the ~~core IMS part~~ sixth receiver to the user equipment which has transmitted the content delivery request, wherein the first transmitter ~~selected sub content specification information transmission unit~~ is configured to transmit, when the one or more connection control servers

~~connection control system~~ executes a process for establishing the connection, via the ~~core IMS part~~ sixth receiver to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a ~~content outputting unit~~ second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

12. (Currently Amended) The content delivery system according to claim 11, wherein:

the user equipment comprises:

a ~~selected sub content specification information reception unit~~ third receiver for receiving the selected sub content specification information transmitted by the ~~service control functions part~~ controller; and

a ~~content viewing request transmission unit~~ second transmitter for transmitting, to the ~~media functions part~~ forth transmitter, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub

content specification information, when connection with the ~~media functions part~~ forth transmitter is established by the ~~core IMS part~~ sixth receiver, and

the ~~media functions part~~ forth transmitter comprises a ~~content delivering unit~~ fourth receiver for receiving the main content viewing request transmitted by the user equipment and transmitting to the user equipment main content data identified by the main content identification information contained in the received main content viewing request, and for receiving the sub content viewing request transmitted by the user equipment and transmitting to the user equipment sub content data specified by the selected sub content specification information contained in the received sub content viewing request.

13. (Currently Amended) The content delivery system according to claim 11, wherein the user equipment comprises a ~~content outputting unit~~ second receiver for receiving main content data and sub content data transmitted by the ~~media functions part~~ forth transmitter, and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

14. (Currently Amended) The content delivery system according to claim 11, wherein

the ~~selected sub content specification information reception unit~~ third receiver is configured to receive the play-list information transmitted by the ~~service control functions part~~ controller; and

the ~~content viewing request transmission unit~~ second transmitter is configured to transmit the main content viewing request and the sub content viewing request to the ~~media functions part~~

forth transmitter, based on the received play-list information.

15. (Currently Amended) A content delivery method comprising:

receiving equipment specification information transmitted by user equipment and establishing connection between an application server system and the user equipment based on the received equipment specification information, by one or more connection control servers ~~a connection control system~~;

receiving a content delivery request containing main content identification information for identifying main content and transmitted by the user equipment, by the application server system;

selecting sub content data stored in a storing device for storing sub content data representing sub content and main content data representing main content, based on selection information containing attribute information representing an attribute of sub content;

transmitting selected sub content specification information specifying the selected sub content data via the one or more connection control servers ~~connection control system~~ to the user equipment which has transmitted the content delivery request, by the application server system; and

transmitting, when the one or more connection control servers ~~connection control system~~ executes a process for establishing the connection, via the one or more connection control servers ~~connection control system~~ to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by

the main content identification information and the sub content specified by the selected sub content specification information are output, by the application server system,

wherein the user equipment comprises a ~~content outputting unit~~ second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

16. (Currently Amended) The content delivery method according to claim 15, comprising:

receiving the selected sub content specification information transmitted by the application server system, by the user equipment;

transmitting, to the application server system, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information, by the user equipment, when connection between the user equipment and the application server system is established by the one or more connection control servers ~~connection control system~~; and

receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by main content identification information contained in the received main content viewing request to the user equipment, and receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by selected sub content specification information contained in the received sub content viewing request to the

user equipment, by the application server system.

17. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the main content data and the sub content data transmitted by the application server system, and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data, by the user equipment.

18. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the play-list information transmitted by the application server system, by the user equipment; and

transmitting the main content viewing request and the sub content viewing request to the application server system based on the received play-list information, by the user equipment.

19. (Currently Amended) A service control server comprising:

~~a delivery request reception unit~~ a first receiver for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via a one or more connection control servers ~~connection control system~~ establishing connection between a media server and the user equipment;

an ~~sub content selection unit~~ processor for selecting sub content data preliminarily stored in a storing device, based on selection information containing attribute information representing an

attribute of sub content; and

a first transmitter ~~selected sub content specification information transmission unit~~ for transmitting selected sub content specification information specifying the selected sub content data via the one or more connection control servers ~~connection control system~~ to the user equipment which has transmitted the content delivery request, wherein

the first transmitter ~~selected sub content specification information transmission unit~~ is configured to transmit, when the one or more connection control servers ~~connection control system~~ executes a process for establishing the connection, via the one or more connection control servers ~~connection control system~~ to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a ~~content outputting unit~~ second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

20. (Canceled)

21. (Currently Amended) A user equipment comprising:

a ~~selected sub content specification information reception unit~~ third receiver for receiving selected sub content specification information selected based on selection information containing attribute information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application server system, via a one or more connection control servers ~~connection control system~~ establishing connection between the application server system and the user equipment, wherein the ~~selected sub content specification information reception unit~~ third receiver is configured to, when the one or more connection control servers ~~connection control system~~ executes a process for establishing the connection, receive the play-list information transmitted by the application server system, via the one or more connection control servers ~~connection control system~~ to the user equipment which has transmitted the content delivery request, wherein the play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output;

a ~~content viewing request transmission unit~~ second transmitter for transmitting, to the application server system, a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information when connection with the application server system

is established by the one or more connection control servers ~~connection control system~~, wherein the ~~content viewing request transmission unit~~ second transmitter is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information; and

a ~~content outputting unit~~ second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

22. (Canceled)

23. (Canceled)

24. (Previously Presented) The content delivery system according to claim 1, wherein the sub content is advertisement content.

25. (Currently Amended) A content delivery system comprising an application server system and one or more connection control servers ~~a connection control system~~,

the one or more connection control servers ~~connection control system~~ being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment

specification information,

the application server system comprising:

~~content storage means~~ a memory for storing sub content data representing sub content and main content data representing main content;

~~delivery request reception means~~ a first receiver for receiving, a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

~~sub content selection means~~ a processor for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content; and

~~selected sub content specification information transmission means~~ a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data via the one or more connection control servers ~~connection control system~~ to the user equipment which has transmitted the content delivery request, wherein the ~~selected sub content specification information transmission means~~ first transmitter is configured to transmit, when the one or more connection control servers ~~connection control system~~ executes a process for establishing the connection, via the one or more connection control servers ~~connection control system~~ to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by

the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a ~~content outputting unit~~ second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

26. (Currently Amended) A content delivery system comprising an application server system and one or more connection control servers ~~a connection control system~~,

the one or more connection control servers ~~connection control system~~ comprising a ~~core IMS (Internet Protocol Multimedia Subsystem) part~~ sixth receiver for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a ~~media functions part~~ forth transmitter for transmitting content data representing content to the user equipment with which the connection is established by the ~~core IMS part~~ sixth receiver;

a ~~service control functions part~~ controller for controlling a service provided by the ~~media functions part~~ forth transmitter; and

a ~~user profile server functions part~~ second memory for storing profile information of a user of the user equipment,

the ~~media functions part~~ forth transmitter comprising ~~content storage means~~ a memory for storing sub content data representing sub content and main content data representing main content,

the ~~service control functions part~~ controller comprising:

~~delivery request reception means~~ a first receiver for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the ~~core IMS part~~ sixth receiver; and

~~sub content selection means~~ a processor for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content and preliminarily stored by the user profile server functions part, the ~~service control functions part~~ controller or the one or more connection control servers ~~connection control system~~; and

~~selected sub content specification information transmission means~~ a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data, via the ~~core IMS part~~ sixth receiver to the user equipment which has transmitted the content delivery request, wherein the ~~selected sub content specification information transmission means~~ first transmitter is configured to transmit, when the one or more connection control servers ~~connection control system~~ executes a process for establishing the connection, via the ~~core IMS part~~ sixth receiver to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in

the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a ~~content outputting unit~~ second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

27. (Currently Amended) A service control server comprising:

~~delivery request reception means~~ a first receiver for receiving a content delivery request containing main content identification information for identifying main content and transmitted by user equipment, via a one or more connection control servers ~~connection control system~~ establishing connection between a media server and the user equipment;

~~sub content selection means~~ a processor for selecting sub content data preliminarily stored in a storing device based on selection information containing attribute information representing an attribute of sub content; and

~~selected sub content specification information transmission means~~ a first transmitter for transmitting selected sub content specification information specifying the selected sub content data, via the one or more connection control servers ~~connection control system~~ to the user equipment

which has transmitted the content delivery request, wherein the ~~selected sub content specification information transmission means~~ first transmitter is configured to transmit, when the one or more connection control servers ~~connection control system~~ executes a process for establishing the connection, via the one or more connection control servers ~~connection control system~~ to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a ~~content outputting unit~~ second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

28. (Currently Amended) A user equipment comprising:

~~selected sub content specification information reception means~~ a third receiver for receiving selected sub content specification information selected based on selection information containing attribute information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application server system, via one or

more connection control servers ~~a connection control system~~ establishing connection between the application server system and the user equipment, wherein the ~~selected sub content specification information reception means~~ third receiver is configured to, when the one or more connection control servers ~~connection control system~~ executes a process for establishing the connection, receive the play-list information transmitted by the application server system, via the one or more connection control servers ~~connection control system~~ to the user equipment which has transmitted the content delivery request, wherein the play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output;

~~content viewing request transmission means~~ a second transmitter for transmitting, to the application server system, a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information, when connection with the application server system is established by the one or more connection control servers ~~connection control system~~, wherein the ~~content viewing request transmission means~~ a second transmitter is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information; and

a ~~content outputting unit~~ second receiver for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content

data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

29. (Currently Amended) A server comprising:

a memory; and

one or more processors, wherein the one or more processors are configured to:

store a plurality of sub content data and a plurality of main content data, wherein each of the plurality of sub content data is associated with one or more sub content attributes;

receive a content delivery request from a user device, wherein the content delivery request identifies first main content data of the plurality of main content data;

select at least first sub content data and second sub content data from the plurality of sub content data based on the first sub content data and the second sub content data being associated with at least a particular attribute of the sub content attributes;

transmit a first choice option corresponding to the first sub content data and a second choice option corresponding to the second sub content data to the user device; and

transmit play-list information to the user device via a connection established by one or more connection control servers ~~a connection control system~~ when the one or more connection control servers establish a connection, wherein the play-list information identifies the main content, the first sub content data, the second sub content data, and a sequence in which the main content, the first sub content data, the second sub content data are to be output,

wherein the user device comprises a ~~content outputting unit~~ second receiver for receiving

main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

30. (Previously Presented) The server according to claim 29, wherein the one or more processors are further configured to:

receive a sub content viewing request from the user device, wherein the sub content viewing request contains a selected choice corresponding to either the first choice option or the second choice option;

transmit the first sub content data to the user device as selected sub content data if the selected choice corresponds to the first choice option;

transmit the second sub content data to the user device as the selected sub content data if the selected choice corresponds to the second choice option; and

transmit the first main content data identified by the content delivery request to the user device.

31. (Previously Presented) The server according to claim 30, wherein a user inputs a selection command to the user device to select the first choice option or the second choice option as the selected choice.

32. (Previously Presented) The server according to claim 30, wherein one or more processors are

further configured to:

transmit the first main content data and the selected sub content data to the user device for viewing on the user device.

33. (Previously Presented) The server according to claim 29, wherein the content delivery request from the user device contains user information about a user of the user device, and

wherein the one or more processors are further configured to select the first sub content data and the second sub content data when the particular attribute corresponds to the user information.

34. (Previously Presented) The server according to claim 30, wherein the content delivery request from the user device contains user information about a user of the user device, and

wherein the one or more processors are further configured to select the first sub content data and the second sub content data when the particular attribute corresponds to the user information.

35. (Previously Presented) The server according to claim 29, wherein the one or more processors are further configured to:

associate each of the plurality of main content data with one or more main content attributes;

select the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content.

36. (Previously Presented) The server according to claim 30, wherein the one or more processors

are further configured to:

associate each of the plurality of main content data with one or more main content attributes;

select the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content.

37. (Currently Amended) A content delivery system comprising an application server system and one or more connection control servers ~~a connection control system~~,

the one or more connection control servers ~~connection control system~~ being configured to receive user identification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received user identification information,

the application server system comprising:

~~a delivery request reception unit~~ a first receiver for receiving a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content, via the one or more connection control servers ~~connection control system~~;

a ~~sub content selection unit~~ processor for selecting the sub content data based on user basic information or the main content identification information, the user basic information being associated with the user identification information for identifying a user of the user equipment having transmitted the content delivery request, and the main content identification information being contained by the content delivery request; and

a first transmitter ~~selected sub content specification information transmission unit~~ for transmitting selected sub content specification information for specifying the selected sub content data via the one or more connection control servers ~~connection control system~~ to the user equipment which has transmitted the content delivery request, wherein the first transmitter ~~selected sub content specification information transmission unit~~ is configured to transmit, when the one or more connection control servers ~~connection control system~~ executes a process for establishing the connection, via the one or more connection control servers ~~connection control system~~ to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

38. (Currently Amended) A content delivery system comprising an application server system and one or more connection control servers ~~a connection control system~~,

the one or more connection control servers ~~connection control system~~ comprising a ~~core IMS (Internet Protocol Multimedia Subsystem) part~~ sixth receiver for receiving user identification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received user identification information,

the application server system comprising:

a ~~media functions part~~ forth transmitter for transmitting content data representing content to the user equipment with which connection is established by the ~~core IMS part~~ sixth receiver;

a ~~service control functions part~~ controller for controlling a service provided by the ~~media functions part~~ forth transmitter; and

a ~~user profile server functions part~~ second memory for storing profile information of a user of the user equipment, and

the ~~service control functions part~~ controller comprising:

~~a delivery request reception unit~~ a first receiver for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the ~~core IMS part~~ sixth receiver; and

a ~~sub content selection unit~~ processor for selecting sub content data based on user basic information or the main content identification information, the user basic information being associated with the user identification information for identifying a user of the user equipment having transmitted the content delivery request, and the main content identification information being contained by the content delivery request; and

a first transmitter ~~selected sub content specification information transmission unit~~ for transmitting selected sub content specification information for specifying the selected sub content data via the ~~core IMS part~~ sixth receiver to the user equipment which has transmitted the content delivery request, wherein the first transmitter ~~selected sub content specification information transmission unit~~ is configured to transmit, when the one or more connection control servers

~~connection control system~~ executes a process for establishing the connection, via the ~~core IMS part~~ sixth receiver to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

39. (Currently Amended) A content delivery method comprising:

receiving user identification information transmitted by user equipment and establishing connection between an application server system and the user equipment based on the received user identification information, by one or more connection control servers ~~a connection control system~~;

receiving a content delivery request containing main content identification information for identifying main content and transmitted by the user equipment, via the one or more connection control servers ~~connection control system~~, by the application server system;

selecting sub content data representing sub content based on user basic information or the main content identification information, the user basic information being associated with the user identification information for identifying a user of the user equipment having transmitted the content delivery request, and the main content identification information being contained by the content delivery request; and

transmitting, when the one or more connection control servers ~~connection control system~~ executes a process for establishing the connection, via the one or more connection control servers ~~connection control system~~ to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and ~~the~~ selected sub content specification information specifying the selected sub content data, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output, by the application server system.

40. (Currently Amended) A non-transitory computer-readable medium storing a program comprising instructions for causing a service control server to realize:

~~a delivery request reception unit~~ a first receiver for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via one or more connection control servers ~~a connection control system~~ establishing connection between a media server and the user equipment;

a ~~sub content selection unit~~ processor for selecting sub content data based on content basic information associated with the main content identification information contained by the content delivery request; and

a first transmitter ~~selected sub content specification information transmission unit~~ for transmitting selected sub content specification information specifying the selected sub content data

via the one or more connection control servers ~~connection control system~~ to the user equipment which has transmitted the content delivery request, wherein the first transmitter ~~selected sub content specification information transmission unit~~ for transmitting, when the one or more connection control servers ~~connection control system~~ executes a process for establishing the connection, via the one or more connection control servers ~~connection control system~~ to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

41. (Currently Amended) A service control server comprising:

~~a delivery request reception unit~~ a first receiver for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via one or more connection control servers ~~a connection control system~~ establishing connection between a media server and the user equipment;

a ~~sub content selection unit~~ processor for selecting sub content data based on content basic information associated with the main content identification information contained by the content delivery request; and

a first transmitter ~~selected sub content specification information transmission unit~~ for transmitting selected sub content specification information specifying the selected sub content data

via the one or more connection control servers ~~connection control system~~ to the user equipment which has transmitted the content delivery request, wherein the first transmitter ~~selected sub content specification information transmission unit~~ is configured to transmit, when the one or more connection control servers ~~connection control system~~ executes a process for establishing the connection, via the one or more connection control servers ~~connection control system~~ to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

REMARKS

Claims 1, 2, 4-6, 8-19, 21, and 24-41 have been examined. Claims 1, 2, 4-6, 8-19, 21, 24-38, 40 and 41 are rejected under 35 USC 112 and claims 1, 2, 4-6, 8-19, 21, and 24-41 have been rejected under 35 USC 103.

I. Claim Rejections – 35 USC § 112

Claims 1, 2, 4-6, 8-19, 21, 24-38, 40 and 41 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as allegedly being indefinite. Applicant respectfully disagrees. However, in order to forward the present application toward allowance, Applicant has amended the claims to remove the allegedly indefinite terms. Applicant submits that the amendments overcome the rejection.

II. Rejection under 35 USC § 103(a) over U.S. Patent Application Publication No. 2008/0256216 to AARTS ("AARTS") in view of U.S. Patent No. 8,458,184 to Dorogusker et al. ("Dorogusker")

Claims 1, 2, 4-6, 8-10, 15-19, 21, 24, 25, 27-37 and 39-41 were rejected under 35 USC § 103(a) over AARTS in view of Dorogusker.

A. Claim 1

Applicant submits that Dorogusker, alone or in combination with AART, does not disclose all of the features of claim 1. For example, claim 1 states an application server system comprises a first transmitter for transmitting selected sub content specification information for specifying the selected sub content data via the one or more connection control servers to the user equipment which has transmitted the content delivery request. The first transmitter is configured to ***transmit, when the one or more connection control servers executes a process for establishing the connection***, via the one or more connection control servers to the user equipment which has transmitted the content delivery request, ***play-list information*** which is information containing the

main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output. In other words, claim 1 states that the first transmitter configured to ***transmit play-list information <u>when</u> the one or more connection control servers executes a process for establishing the connection.***

The Examiner appears to assert that Dorogusker discloses this limitation. *See* Office Action at 3-5. However, even assuming for the sake of argument that Dorogusker discloses transmission of play-list information, Dorogusker is silent as to the ***timing*** of any such transmission. In other words, Dorogusker fails to disclose or even suggest ***<u>when</u>*** any such transmission occurs, let alone that it a first transmitter is configured to ***transmit play-list information <u>when</u> the one or more connection control servers executes a process for establishing the connection***. Thus, in contrast to Dorogusker, in a non-limiting exemplary embodiment, the present system can perform the process of establishing a connection and transmitting play-list information together in order to deliver the playlist information to the user immediately when the connection is established, thereby improving the user experience.

The Examiner acknowledges that AART does not cure the above deficiencies. *See* Office Action at 14.

Accordingly, Applicants submit that claim 1 is patentable for at least the reasons presented above.

B. Claims 2, 4-6, 8-10, and 24

Since claims 2, 4-6, 8-10, and 24 depend on claim 1, they are patentable at least based on their dependency.

C. Claims 15, 19, 21, 25, 27-29, 37, and 39-41

Claims 15, 19, 21, 25, 27-29, 37, and 39-41 contain features that are similar or analogous to those discussed in conjunction with claim 1. Therefore, Applicants submit that these claims are patentable for at least similar or analogous reasons.

D. Claims 16-18 and 30-36

Since claims 16-18 and 30-36 depend on claims 15 and 29, they are patentable at least based on their dependency.

III. Rejection under 35 USC § 103(a) over AARTS in view of Dorogusker and further in view of U.S. Patent Application Publication No. 2007/0223523 to Montpetit et al. ("Montpetit")

Claims 11-14, 26, and 38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over AARTS in view of Dorogusker and further in view of Montpetit.

A. Claims 11, 26, and 38

Claims 11, 26, and 38 contain features that are similar or analogous to those discussed in conjunction with claim 1, and since Montpetit does not cure the deficient teachings of AARTS and Dorogusker with respect to claim 1, Applicant submits that claims 11, 26, and 38 are patentable for at least similar reasons.

B. Claims 12-14

Since claims 12-14 depend upon claim 11, and since the Montpetit does not cure the deficient teachings of AARTS and Dorogusker with respect to claim 11, claims 12-14 are patentable at least based on their dependency.

IV. Conclusion

Applicant believes the pending application is in condition for allowance.

In the event the U.S. Patent and Trademark Office determines that an extension is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 08-0219 referencing docket no. 2207946.00141US1.

Applicant believes no other fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-0219, under Order No. 2207946.00141US1 from which the undersigned is authorized to draw.

Respectfully submitted,

Dated: July 25, 2016

/Michael Smith/

Michael H. Smith
Registration No.: 71,190
Attorney for Applicant(s)

Wilmer Cutler Pickering Hale and Dorr LLP
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Washington, DC 20006
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(202) 663-6363 (facsimile)

PTO/AIA/22 (03-13)
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PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)	Docket Number (Optional) 2207946.00141US1
Application Number 13/129,756-Conf. #1971	Filed May 17, 2011
For CONTENT DELIVERY SYSTEM	
Art Unit 2463	Examiner N. Pascual Peguero

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

	Fee	Small Entity Fee	Micro Entity Fee	
[X] One month (37 CFR 1.17(a)(1))	$200	$100	$50	$ 200.00
[ ] Two months (37 CFR 1.17(a)(2))	$600	$300	$150	$
[ ] Three months (37 CFR 1.17(a)(3))	$1,400	$700	$350	$
[ ] Four months (37 CFR 1.17(a)(4))	$2,200	$1,100	$550	$
[ ] Five months (37 CFR 1.17(a)(5))	$3,000	$1,500	$750	$

[ ] Applicant asserts small entity status. See 37 CFR 1.27.

[ ] Applicant certifies micro entity status. See 37 CFR 1.29.
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

[ ] A check in the amount of the fee is enclosed.

[X] Payment by credit card. ~~Form PTO-2038 is attached~~.

[ ] The Director has already been authorized to charge fees in this application to a Deposit Account.

[X] The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 08-0219 .

[X] Payment made via 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.

I am the

[ ] applicant.

[ ] attorney or agent of record. Registration number _____ .

[X] attorney or agent acting under 37 CFR 1.34. Registration number 41,278 .

/Michael Smith/	July 25, 2016
Signature	Date
Michael H. Smith	(202) 663-6000
Typed or printed name	Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

[ ] * Total of 1 forms are submitted.

Electronic Patent Application Fee Transmittal

Application Number:	13129756
Filing Date:	17-May-2011
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Filer:	Michael Hal Smith/Lisa Morris
Attorney Docket Number:	J-11-0248

Filed as Large Entity

Filing Fees for U.S. National Stage under 35 USC 371

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($)
Extension - 1 month with $0 paid	1251	1	200	200
Miscellaneous:				
			Total in USD ($)	**200**

Electronic Acknowledgement Receipt

EFS ID:	26450214
Application Number:	13129756
International Application Number:	
Confirmation Number:	1971
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Customer Number:	71799
Filer:	Michael Hal Smith/Lisa Morris
Filer Authorized By:	Michael Hal Smith
Attorney Docket Number:	J-11-0248
Receipt Date:	25-JUL-2016
Filing Date:	17-MAY-2011
Time Stamp:	20:32:03
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$200
RAM confirmation Number	072616INTEFSW20335900
Deposit Account	1006
Authorized User	Lisa Morris

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

37 CFR 1.17 (Patent application and reexamination processing fees)

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		2207946_00141US1_Amendment_After_Final_Action.PDF	216271 10a340660d061b89bf691c5f40fd6a405ba907a8	yes	36
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Response After Final Action		1	1	
	Claims		2	32	
	Applicant Arguments/Remarks Made in an Amendment		33	36	
Warnings:					
Information:					
2	Extension of Time	2207946_00141US1_Petition_for_Extension_of_Time.PDF	77164 ba418f6e37030c4fb066e9744c93d59c81d01d1a	no	1
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30682 3bfdeccc7729e2be2575a8a1f3009e8c824e9ab3	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	324117		

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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.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/129,756	Filing Date 05/17/2011	☐ To be Mailed

ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) 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), (i), 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 $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ 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

AMENDMENT **07/25/2016**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 36	Minus	** 41	= 0	X $80 =	0
Independent (37 CFR 1.16(h))	* 15	Minus	***15	= 0	X $420 =	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

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
☐ 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.
** 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 number found in the appropriate box in column 1.

LIE
STEFANIE BRYCE

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:	26450214
Application Number:	13129756
International Application Number:	
Confirmation Number:	1971
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Customer Number:	71799
Filer:	Michael Hal Smith/Lisa Morris
Filer Authorized By:	Michael Hal Smith
Attorney Docket Number:	J-11-0248
Receipt Date:	25-JUL-2016
Filing Date:	17-MAY-2011
Time Stamp:	20:32:03
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$200
RAM confirmation Number	072616INTEFSW20335900
Deposit Account	080219
Authorized User	Lisa Morris

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

37 CFR 1.17 (Patent application and reexamination processing fees)

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		2207946_00141US1_Amendment_After_Final_Action.PDF	216271 10a340660d061b89bf691c5f40fd6a405ba907a8	yes	36

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Response After Final Action	1	1
	Claims	2	32
	Applicant Arguments/Remarks Made in an Amendment	33	36

Warnings:					
Information:					
2	Extension of Time	2207946_00141US1_Petition_for_Extension_of_Time.PDF	77164 ba418f6e37030c4fb066e9744c93d59c81d01d1a	no	1
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30682 3bfdeccc7729e2be2575a8a1f3009e8c824e9ab3	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	324117		

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.

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Mr. Ryoichi Harada
2100 Pennsylvania Ave., NW
SUITE 560
Washington, DC 20037-3213

Courtesy Reminder for
Application Serial No: 13/129,756

Attorney Docket No: J-11-0248
Customer Number: 71799
Date of Electronic Notification: 03/23/2016

This is a courtesy reminder that new correspondence is available for this application. If you have not done so already, please review the correspondence. The official date of notification of the outgoing correspondence will be indicated on the form PTOL-90 accompanying the correspondence.

An email notification regarding the correspondence was sent to the following email address(es) associated with your customer number:

necipca@necam.com
Yuki.Kandathil@necam.com
Ayano.Reid@necam.com

To view your correspondence online or update your email addresses, please visit us anytime at **https://sportal.uspto.gov/secure/myportal/privatepair.** If you have any questions, please email the Electronic Business Center (EBC) at EBC@uspto.gov or call 1-866-217-9197.

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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/129,756	05/17/2011	Kunihiro Taniguchi	J-11-0248	1971

71799 7590 03/23/2016

Mr. Ryoichi Harada
2100 Pennsylvania Ave., NW
SUITE 560
Washington, DC 20037-3213

EXAMINER
PASCUAL PEGUERO, NATALI

ART UNIT	PAPER NUMBER
2463	

NOTIFICATION DATE	DELIVERY MODE
03/23/2016	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):

necipca@necam.com
Yuki.Kandathil@necam.com
Ayano.Reid@necam.com

Office Action Summary	Application No. 13/129,756	Applicant(s) TANIGUCHI ET AL.	
	Examiner NATALI N. PASCUAL PEGUERO	Art Unit 2463	AIA (First Inventor to File) 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 *17 December 2015*.

☐ 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) *1,2,4-6,8-19,21 and 24-41* 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) *1,2,4-6,8-19,21 and 24-41* 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 *17 May 2011* 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: _____.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

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

Previous Rejections Withdrawn

2. The objection to claim 10 is withdrawn based on applicant's amendment.

3. The 35 U.S.C. 101 rejection to claims 29-36 are withdrawn based on applicant's amendment.

4. The 35 U.S.C. 112(b) rejection to Claims 29-36 (for lacking adequate structure) are withdrawn based on applicant's amendment.

Response to Arguments

5. Applicant's arguments filed on December 17, 2015 have been fully considered but they are not persuasive.

With respect to the rejections for claims 1, 2, 4-6, 8-19, 21, 24-38, 40 and 41 under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph:

Applicant's arguments on pages 30-38 have been fully considered but they are not persuasive with regards to overcoming the 35 U.S.C. 112(b) rejection.

The examiner respectfully disagrees and maintains the 35 U.S.C. 112(b) rejections for claims 1, 2, 4-6, 8-19, 21, 24-38 and 41. The claim limitation(s) recite non-structural terms (i.e. unit, part, system etc.) coupled with functional language which

is/are limitation(s) that invoke(s) 35 U.S.C. 112(f), sixth paragraph. However, the written description fails to disclose the corresponding structure, material, hardware or acts for the claimed functions. Applicant's specification merely repeats similar statements that are recited in the claims, as such the Applicant's specification lacks of sufficient descriptions for the claimed functions.

Thus, claims 1, 2, 4-6, 8-19, 21, 24-38 and 41 are rejected under 35 U.S.C. 112(b), second paragraph. (See 35 U.S.C. 112(b) rejection below).

With respect to rejections for claim 1 under 35 USC 103:

The applicant presented arguments on pages 38 and 39 that Dorogusker, alone or in combination with AARTS fails to show certain features of applicant's invention, for example, "the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information".

The examiner respectfully disagrees with the arguments presented by the applicant. Dorogusker teaches the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection **(Col. 10, lines 38-41; PMD 190 can be adapted to connect to a data network, e.g., via wired or wireless connection**

(not explicitly shown in FIG. 1F)… Col. 20, lines 48-53; The transfer of tags from receiver 1208 to PMD 1212 and the transfer of tags from PMD 1212 to host computer 1214 can be fully automated; that is, receiver 1208 can automatically detect when PMD 1212 is connected thereto and can automatically transfers the tags (including any accumulated tags) whenever a connection is detected), via the connection control system to the user equipment which has transmitted the content delivery request **(See Abstract; Each time the user requests a new tag, the accessory generates a tag containing information descriptive of the broadcast material (e.g., song title, artist, radio station identifier, time of tagging, etc.) and writes the tag to the tag file using a write command to the PMD)**, play-list information **(Col. 20, lines 41-44; After receiving the user's tags from receiver 1208, PMD 1212 can be connected to host computer 1214. Host computer 1214 can read the stored tags from PMD 1212 and produce a list (e.g., a item list or playlist) of the user's tagged content)** which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio advertisement), etc. When only one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In**

step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the review is complete, the user may be presented with an opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20).

It has been shown that Dorogusker clearly teaches the above limitations, and therefore the rejection is maintained.

With respect to rejections for claims 2, 4-6, 8-10 and 24 under 35 USC 103:

The applicant's arguments have been fully considered but they are not persuasive. The teachings in the references clearly address the limitations in claim 1, and therefore the rejection with respect to claims 2, 4-6, 8-10 and 24 are maintained.

With respect to rejections for claims 15, 19, 21, 25, 27-29, 37 and 39-41 under 35 USC 103:

The applicant's arguments have been fully considered but they are not persuasive. The teachings in the references clearly address the limitations in claim 1, and therefore the rejection with respect to claims 15, 19, 21, 25, 27-29, 37 and 39-41 are maintained.

With respect to rejections for claims 16-18 and 30-36 under 35 USC 103:

The applicant's arguments have been fully considered but they are not persuasive. The teachings in the references clearly address the limitations in claims 15 and 29, and therefore the rejection with respect to claims 16-18 and 30-36 are maintained.

With respect to claims rejections for 11, 26 and 38 under 35 USC 103:

The applicant's arguments have been fully considered but they are not persuasive. Claims 11, 26 and 38 contains features that are similar or analogous to those discussed in claim 1. The teachings in the references clearly address the limitations in claim 1, and therefore the rejection with respect to claims 11, 26 and 38 are maintained.

With respect to rejections for claims 12-14 under 35 USC 103:

The applicant's arguments have been fully considered but they are not persuasive. The teachings in the references clearly address the limitations in claim 11, and therefore the rejection with respect to claims 12-14 are maintained.

Claim Rejections - 35 USC § 112

6. The following is a quotation of 35 U.S.C. 112(b):

> (b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. **Claims 1, 2, 4-6, 8-19, 21, 24-38, 40 and 41** are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

a. Regarding **claims 1, 11, 19, 37, 38, 40 and 41**, elements "the connection control system being configured to…", "a delivery request reception unit", "a sub content selection unit", "a selected sub content specification information transmission unit" and "a content outputting unit" are using non-structural term **(i.e. "unit")** coupled with functional language that invoke 35 U.S.C. 112(f). However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function.

i. **Claims 2, 4-6, 8-10, 12-14 and 24** depend on **claims 1 and 11** respectively; however, they do not add any feature or subject matter that would solve any of the deficiencies of **claims 1 and 11**.

b. Regarding **claims 2, 12, 14, 21**, elements "a selected sub content specification information reception unit", "a content viewing request transmission unit" and "a content delivering unit" are using non-structural term **(i.e. "unit")**

coupled with functional language that invoke 35 U.S.C. 112(f). However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function.

c. Regarding **claim 10**, elements "an selection information transmission unit", "an selection information reception unit" and "a content delivering unit" are using non-structural term **(i.e. "unit")** coupled with functional language that invoke 35 U.S.C. 112(f). However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function.

d. Regarding **claims 11, 26 and 38**, elements "a core IMS (Internet Protocol Multimedia Subsystem) part", "a media functions part" and "a service control functions part" are using non-structural term **(i.e. "part")** coupled with functional language that invoke 35 U.S.C. 112(f). However, the written description fails to disclose the corresponding computer/hardware for the claimed function.

i. **Claims 12-14** depend on **claim 11**; however, they do not add any feature or subject matter that would solve any of the deficiencies of **claim 11**.

e. Regarding **claim 15 and 25-29**, element "a content outputting unit" is using non-structural term **(i.e. "unit")** coupled with functional language that

invoke 35 U.S.C. 112(f). However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function.

i. **Claims 16-18 and 30-36** depend on **claims 15 and 29** respectively; however, they do not add any feature or subject matter that would solve any of the deficiencies of **claims 15 and 29**.

f. Regarding **claims 25-27**, recite "the connection control system being configured …", "delivery request reception means…", "sub content selection means…" and "selected sub content specification information transmission means…" and is using non-structural term coupled with functional language that invoke 35 U.S.C. 112(f). However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function.

g. Regarding **claim 28**, recites "selected sub content specification information reception means …" and "content viewing request transmission means…" and is using non-structural term coupled with functional language that invoke 35 U.S.C. 112(f). However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function.

h. **Regarding claim 37 (line 3)**, recites "the connection control system being configured …" and is using non-structural term **(i.e. "system")** coupled with

functional language that invoke 35 U.S.C. 112(f). However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function.

Applicant may:

(a) Amend the claim so that the claim limitation will no longer be interpreted as a limitation under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it expressly recites what structure, material, or acts perform the claimed function without introducing any new matter (35 U.S.C. 132(a)).

If applicant is of the opinion that the written description of the specification already implicitly or inherently discloses the corresponding structure, material, or acts so that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function, applicant should clarify the record by either:

(a) Amending the written description of the specification such that it expressly recites the corresponding structure, material, or acts for performing the claimed function and clearly links or associates the structure, material, or acts to the claimed function, without introducing any new matter (35 U.S.C. 132(a)); or

(b) Stating on the record what the corresponding structure, material, or acts, which are implicitly or inherently set forth in the written description of the specification, perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

Claim Rejections - 35 USC § 103

8. 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 of this title, 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 negatived by the manner in which the invention was made.

9. **Claims 1, 2, 4 - 6, 8 - 10, 15 - 19, 21, 24, 25, 27 - 37 and 39 – 41** are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over AARTS (Pub # US 2008/0256216 A1) in view of Dorogusker et al. (U.S. Patent # 8,458,184 B2 hereinafter Dorogusker).

Regarding **claim 1**, AARTS teaches a content delivery system **(a method of supplying advertising content; Page 1, Paragraph 0001)** comprising an application server system **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** and a connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)**, the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information **(the authentication service interpreted as "the connection control system" is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page**

2, Paragraph 0021), the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)** comprising: a content storage unit for storing sub content data representing sub content and main content data representing main content **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), and may also track advertisement data sent to a particular user or device; Page 2, Paragraph 0021)**; a delivery request reception unit for receiving **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)** a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**; a sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and a

selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** via the connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose wherein the selected sub content specification information transmission unit is configured to transmit, when the

connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Dorogusker teaches wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection **(Col. 10, lines 38-41; PMD 190 can be adapted to connect to a data network, e.g., via wired or wireless connection (not explicitly shown in FIG. 1F)… Col. 20, lines 48-53; The transfer of tags from receiver 1208 to PMD 1212 and the transfer of tags from PMD 1212 to host computer 1214 can be fully automated; that is, receiver 1208 can automatically detect when PMD 1212 is connected thereto and can automatically transfers the tags (including any accumulated tags) whenever a connection is detected)**, via the connection control system to the user equipment which has transmitted the content delivery request **(See Abstract; Each time the user requests a new tag, the accessory generates a tag containing information descriptive of the broadcast material (e.g., song title, artist, radio station identifier, time of tagging, etc.) and writes the tag to the tag file using a write**

command to the PMD), play-list information **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65)** which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio advertisement), etc. When only one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or**

tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the review is complete, the user may be presented with an opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20), and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Dorogusker with AARTS to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 2**, AARTS discloses wherein: the user equipment comprises **(the user device interpreted as "user equipment"; Page 2, Paragraph 0021)**: a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the application server system **(Fig. 2, step 23 shows that the user device receives advertisement information from**

the advertisement service; Page 2, Paragraph 0022); and a content viewing request transmission unit for transmitting **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**, and the application server system comprises a content delivering unit for receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by the main content identification information contained in the received main content viewing request to the user equipment **(the advertisement service receives a data request in the store (Fig. 1, element 13a) from the user device in accordance to the user's desired content transmitted by the authentication service, and at step 34 transmits the advertisement information to the user device 10; Page 2, Paragraphs 0021 - 0023)**, and for receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by the selected sub content specification information contained in the received sub content viewing request to the user equipment

(Fig. 3, step 30 shows that the advertisement service receives the data request from the user device, and at step 34 transmits the advertisement information to the user device; Page 2, Paragraph 0023).

Regarding **claim 4,** AARTS teaches wherein: the content viewing request transmission unit is configured to transmit **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** the main content viewing request and the sub content viewing request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)** to the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**.

However, AARTS does not specifically disclose the selected sub content specification information reception unit is configured to receive the play-list information transmitted by the application server system; based on the received play-list information.

In an analogous art, Dorogusker teaches the selected sub content specification information reception unit is configured to receive the play-list information transmitted by the application server system **(after receiving the user's tags from receiver 1208, PMD 1212 can be connected to host computer 1214. Host computer 1214 can read the stored tags from PMD 1212 and produce a list (e.g., a item list or playlist) of the user's tagged content. Host computer 1214 can also use the digital signature**

on the tag files to verify that the tags originated from an authenticated receiver and/or as a check on data integrity; Col. 20, lines 41 - 47); based on the received play-list information **(Host computer 1214 can read the stored tags from PMD 1212 and produce a list (e.g., a item list or playlist) of the user's tagged content; Col. 20, lines 41 - 44)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Dorogusker with AARTS to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 5**, AARTS discloses wherein: the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of sub content represented by the sub content data **(the content service (Fig. 1, element 11) interpreted as "the content storage unit" is configured to store the content information comprising content data to be used in providing an output to the user, and metadata interpreted as to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; the selection information contains user basic information that is information for specifying the attribute information and is information associated with user identification information for identifying a user of the user equipment **(in the system of Fig. 5, the user device receives content data and metadata, but in this example the metadata**

comprises a pointer to authentications service, and the fig. 4, step 41 shows that the authentication service identifies the user device from the information transmitted; Page 2, Paragraph 0024 and 0029); and the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the user basic information **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)** associated with the user identification information for identifying the user **(at step 33, the advertisement service generates advertisement information in accordance with the received authentication information used for identifying the user device; Page 2, Paragraph 0023)** of the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**.

Regarding **claim 6**, AARTS discloses wherein: the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of the sub content represented by the sub content data **(the content service (Fig. 1, element 11) interpreted as "the content storage unit" is**

configured to store the content information comprising content data to be used in providing an output to the user, and metadata to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022); the selection information contains content basic information that is information for specifying the attribute information and is information associated with the main content identification information for identifying the main content **(the content information comprising content data to be used in providing an output to the user, and metadata to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; and the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the content basic information associated with the main content identification information **(the authentication service transmits general information thus allowing an advertisement to be personalized to the user, such as age, gender, geographic information or any other information as appropriate. At step 33, the advertisement service generates advertisement information in accordance with the received authentication information; Page 2, Paragraph 0023)** contained in the received content delivery request **(Fig. 3, step 30 shows that the advertisement service receives the data request from the user device; Page 2, Paragraph 0023)**.

Regarding **claim 8**, AARTS discloses wherein the connection control system is configured to establish the connection by exchanging a predetermined connection establishment message with each of the user equipment and the application server system **(the authentication service interpreted as "the connection control system"**

is configured to authenticate the user devices verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021); and the selected sub content specification information transmission unit is configured to transmit the selected sub content specification information to the user equipment **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** via the connection control system **(the authentication service interpreted as "the connection control system"; Page 2, Paragraph 0021)** by incorporating the selected sub content specification information in the connection establishment message **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information used for establishing connection with the user device; Page 2, Paragraph 0023)**.

Regarding **claim 9**, AARTS discloses wherein: the application server system comprises a service control server and a media server **(an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and the service control server comprises the delivery request reception unit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, the sub content selection unit **(the advertisement service generates advertisement information interpreted as "the sub content" in**

accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023), and the selected sub content specification information transmission unit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding **claim 10**, AARTS discloses wherein: the application server system comprises a service control server and a media server **(an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; the service control server comprises the delivery request reception unit **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)**; the media server comprises the content storage unit **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), the sub content selection unit (Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**, and the selected sub content specification information transmission unit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**; the service control server further comprises an selection information transmission unit for

transmitting the selection information to the media server **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information; Page 2, Paragraph 0023)** via the connection control system **(the authentication service interpreted as "the connection control system"; Page 2, Paragraph 0021)**; the media server further comprises an selection information reception unit for receiving the selection information transmitted by the service control server **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and the sub content selection unit is configured to select the sub content data based on the received selection information **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

Regarding **claim 15**, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding **claim 16**, the claim is interpreted and rejected for the same reason as set forth in claim 2.

Regarding **claim 17**, AARTS discloses receiving the main content data and the sub content data transmitted by the application server system **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**, and outputting **(Fig. 2, step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information**

interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022), viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data, by the user equipment **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

Regarding **claim 18**, the claim is interpreted and rejected for the same reason as set forth in claim 4.

Regarding **claim 19**, AARTS teaches a server control server **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** comprising: a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content **(the advertisement device is operable to receive a data request (Fig. 1, element 14) from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)** and transmitted by a user equipment **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** via a connection control system establishing connection between a media server and the user equipment **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; an sub content selection unit for selecting sub

content data preliminarily stored in a storing device **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**, based on selection information containing attribute information representing an attribute of sub content **(the content information comprising content data to be used in providing an output to the user, and metadata to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected content data via the connection control system to the user equipment which has transmitted the content delivery request **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates**

advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023).

However, AARTS does not specifically disclose wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Dorogusker teaches wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection **(Col. 10, lines 38-41; PMD 190 can be adapted to connect to a data network, e.g., via wired or wireless connection (not explicitly shown in FIG. 1F)… Col. 20, lines 48-53; The transfer of tags from receiver 1208 to PMD 1212 and the transfer of tags from PMD 1212 to host computer 1214 can be fully automated; that is, receiver 1208 can automatically detect when PMD 1212 is connected thereto and can automatically transfers the tags (including any accumulated tags) whenever a**

connection is detected), via the connection control system to the user equipment which has transmitted the content delivery request **(See Abstract; Each time the user requests a new tag, the accessory generates a tag containing information descriptive of the broadcast material (e.g., song title, artist, radio station identifier, time of tagging, etc.) and writes the tag to the tag file using a write command to the PMD)**, play-list information **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65)** that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio advertisement), etc. When only one item is**

associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the review is complete, the user may be presented with an opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20), and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Dorogusker with AARTS to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 21**, AARTS teaches a user equipment comprising **(the user device interpreted as "user equipment"; Page 2, Paragraph 0021)**: a selected sub content specification information reception unit for receiving selected sub content specification information **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)** selected based on selection information containing attribute information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application server system **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**, via a connection control system establishing connection between the application server system and the user equipment **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; wherein the selected sub content specification information reception unit **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; a content viewing request

transmission unit for transmitting **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**, a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**, wherein the content viewing request transmission unit **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the media functions part **(the advertisement service interpreted as "the media functions part"; Page 2, Paragraph 0021)** is configured to transmit the main content viewing request and the sub content viewing request to the application server system **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**, a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting **(Fig. 2, step 23 shows that the user device receives advertisement information from the**

advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022), based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose is configured to, when the connection control system executes a process for establishing the connection, receive the play-list information transmitted by an application server system, via the connection control system to the user equipment which has transmitted the content delivery request, wherein the play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output; based on the received play-list information.

In an analogous art, Dorogusker teaches is configured to, when the connection control system executes a process for establishing the connection **(Col. 10, lines 38-41; PMD 190 can be adapted to connect to a data network, e.g., via wired or**

wireless connection (not explicitly shown in FIG. 1F)… Col. 20, lines 48-53; The transfer of tags from receiver 1208 to PMD 1212 and the transfer of tags from PMD 1212 to host computer 1214 can be fully automated; that is, receiver 1208 can automatically detect when PMD 1212 is connected thereto and can automatically transfers the tags (including any accumulated tags) whenever a connection is detected), receive the play-list information transmitted by an application server system, via the connection control system to the user equipment which has transmitted the content delivery request **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65)**, wherein the play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity**

shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio advertisement), etc. When only one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the review is complete, the user may be presented with an opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20), and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**; based on the received play-list information **(Host computer 1214 can read the stored tags from PMD 1212 and produce a list (e.g., a item list or playlist) of the user's tagged content; Col. 20, lines 41 - 44)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Dorogusker with AARTS to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 24**, AARTS discloses wherein the sub content is advertisement content **(advertisement information; Page 1, Paragraph 0005)**.

Regarding **claim 25**, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding **claim 27**, the claim is interpreted and rejected for the same reason as set forth in claim 19.

Regarding **claim 28**, the claim is interpreted and rejected for the same reason as set forth in claim 21.

Regarding **claim 29**, AARTS teaches a server comprising: store a plurality of sub content data and a plurality of main content data **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), and may also track advertisement data sent to a particular user or device; Page 2, Paragraph 0021)**, wherein each of the plurality of sub content data is associated with one or more sub content attributes **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing**

habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013); receive a content delivery request from a user device **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)**, wherein the content delivery request identifies first main content data of the plurality of main content data **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**; select at least first sub content data and second sub content data from the plurality of sub content data based on the first sub content data and the second sub content data being associated with at least a particular attribute of the sub content attributes **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**; transmit a first choice option corresponding to the first sub content data and a second choice option corresponding to the second sub content data to the user device **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, wherein the user device comprises a

content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose a memory; and one or more processors, wherein the one or more processors are configured to: transmit play-list information to the user device via a connection established by a connection control system, wherein the play-list information identifies the main content, the first sub content data, the second sub content data, and a sequence in which the main content, the first sub content data, the second sub content data are to be output.

In an analogous art, Dorogusker teaches a memory **(memory; Col. 14, line 60)**; and one or more processors, wherein the one or more processors **(programmable processors; Col. 22, lines 62-63)** are configured to: transmit play-list information to the user device via a connection established by a connection control system, wherein the

play-list information identifies the main content **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65)**, the first sub content data, the second sub content data, and a sequence in which the main content, the first sub content data, the second sub content data are to be output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Dorogusker with AARTS to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 30**, AARTS discloses wherein the one or more processors are further configured to: receive a sub content viewing request from the user device, wherein the sub content viewing request contains a selected choice corresponding to either the first choice option or the second choice option **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**; transmit the first sub content data to the user device as selected sub content data if the selected choice corresponds to the first choice option; transmit the second sub content data to the user device as the selected sub content data if the selected choice corresponds to the second choice option **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**; and transmit the first main content data identified by the content delivery request to the user device **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding **claim 31**, AARTS discloses wherein a user inputs a selection command to the user device to select the first choice option or the second choice option as the selected choice **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received**

authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023).

Regarding **claim 32**, AARTS discloses wherein one or more processors are configured to: transmit the first main content data and the selected sub content data to the user device for viewing on the user device **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding **claim 33**, AARTS discloses wherein the content delivery request from the user device contains user information about a user of the user device **(the user information store (Fig. 1, element 16a) comprise demographic information corresponding to the user; Page 1, Paragraph 0010)**, and wherein the one or more processors are further configured to select the first sub content data and the second sub content data when the particular attribute corresponds to the user information **(an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**.

Regarding **claim 34**, the claim is interpreted and rejected for the same reason as set forth in claim 33.

Regarding **claim 35**, AARTS discloses wherein the one or more processors are further configured: associate each of the plurality of main content data with one or more main content attributes **(the user profile information may simply categorize the user**

in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023); select the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**.

Regarding **claim 36**, the claim is interpreted and rejected for the same reason as set forth in claim 35.

Regarding **claim 37**, AARTS teaches a content delivery system **(a method of supplying advertising content; Page 1, Paragraph 0001)** comprising an application server system **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** and a connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)**, the connection control system being configured to receive user identification information transmitted by user equipment and establish

connection between the application server system and this user equipment based on the received user identification information **(the authentication service interpreted as "the connection control system" is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021)**, the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)** comprising: a delivery request reception unit for receiving **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)** a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content, via the connection control system **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**; a sub content selection unit for selecting the sub content data based on user basic information or the main content identification information **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it**

to the user device ; Page 1, Paragraph 0013), the user basic information being associated with the user identification information for identifying a user of the user equipment having transmitted the content delivery request, and the main content identification information being contained by the content delivery request **(transmitting a data request to the advertisement service in accordance with the metadata, transmitting an authentication request to an authentication server, receiving an authentication response, the authentication response comprising user information, and transmitting advertisement information in accordance with the user information; Page 1, Paragraph 0005)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** via the connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**.

However, AARTS does not specifically disclose wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content

identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Dorogusker teaches wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection **(Col. 10, lines 38-41; PMD 190 can be adapted to connect to a data network, e.g., via wired or wireless connection (not explicitly shown in FIG. 1F)… Col. 20, lines 48-53; The transfer of tags from receiver 1208 to PMD 1212 and the transfer of tags from PMD 1212 to host computer 1214 can be fully automated; that is, receiver 1208 can automatically detect when PMD 1212 is connected thereto and can automatically transfers the tags (including any accumulated tags) whenever a connection is detected)**, via the connection control system to the user equipment which has transmitted the content delivery request **(See Abstract; Each time the user requests a new tag, the accessory generates a tag containing information descriptive of the broadcast material (e.g., song title, artist, radio station identifier, time of tagging, etc.) and writes the tag to the tag file using a write command to the PMD)**, play-list information **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input**

indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65) which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio advertisement), etc. When only one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the review is complete, the user may be presented with an**

opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20), and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Dorogusker with AARTS to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 39**, the claim is interpreted and rejected for the same reason as set forth in claim 37.

Regarding **claim 40**, AARTS teaches a non-transitory computer-readable medium storing a program comprising instructions for causing a service control server to realize: a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content **(the advertisement device is operable to receive a data request (Fig. 1, element 14) from the user device, said data request is transmitted in accordance with the**

metadata received in the content information; Page 2, Paragraphs 0021 - 0022) and transmitted by a user equipment **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** via a connection control system establishing connection between a media server and the user equipment **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; a sub content selection unit for selecting sub content data based on content basic information associated with the main content identification information contained by the content delivery request **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose wherein the selected sub content specification information transmission unit for transmitting, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information

contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Dorogusker teaches wherein the selected sub content specification information transmission unit for transmitting, when the connection control system executes a process for establishing the connection **(Col. 10, lines 38-41; PMD 190 can be adapted to connect to a data network, e.g., via wired or wireless connection (not explicitly shown in FIG. 1F)… Col. 20, lines 48-53; The transfer of tags from receiver 1208 to PMD 1212 and the transfer of tags from PMD 1212 to host computer 1214 can be fully automated; that is, receiver 1208 can automatically detect when PMD 1212 is connected thereto and can automatically transfers the tags (including any accumulated tags) whenever a connection is detected)**, via the connection control system to the user equipment which has transmitted the content delivery request **(See Abstract; Each time the user requests a new tag, the accessory generates a tag containing information descriptive of the broadcast material (e.g., song title, artist, radio station identifier, time of tagging, etc.) and writes the tag to the tag file using a write command to the PMD)**, play-list information **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is**

receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65) that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio advertisement), etc. When only one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the review is complete, the user may be presented with an opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20)**, and is

information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Dorogusker with AARTS to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 41**, the claim is interpreted and rejected for the same reason as set forth in claim 40.

10. **Claims 11 - 14, 26 and 38** are rejected under 35 U.S.C. 103(a) as being unpatentable over AARTS in view of Dorogusker, and further in view of Montpetit et al. (Pub # US 2007/0223523 A1 hereinafter Montpetit).

Regarding **claim 11**, AARTS teaches a content delivery system **(a method of supplying advertising content; Page 1, Paragraph 0001)** comprising an application server system **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph**

0021) and a connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)**, the connection control system for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information **(the authentication service interpreted as "the connection control system" is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021)**, the application server system comprising **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**: a media functions part for transmitting content data representing content to the user equipment **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** with which the connection is established **((Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; a service control functions part for controlling a service provided by the media functions part **(an advertisement server is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and a user profile server functions part for storing profile information of a user of the user equipment **(the user information store (Fig. 1, element 16a) comprise demographic information corresponding to the user; Page 1, Paragraph**

0010), the media functions part comprising a content storage unit for storing sub content data representing sub content and main content data representing main content **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), and may also track advertisement data sent to a particular user or device; Page 2, Paragraph 0021)**, the service control functions part comprising: a delivery request reception unit for receiving **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)** a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment content **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**; and an sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)** and preliminarily stored by the user profile server functions part **(Fig. 2, step 21 shows that the user device receives data including content information from the content service; Page 2, Paragraph 0022)**, the service control functions part or the connection control system **(the authentication service interpreted as "the connection control system"; Page**

2, Paragraph 0021); and a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data to the user equipment which has transmitted the content delivery request **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose a core IMS (Internet Protocol Multimedia Subsystem) part; wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that

is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Dorogusker teaches wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, to the user equipment which has transmitted the content delivery request **(Col. 10, lines 38-41; PMD 190 can be adapted to connect to a data network, e.g., via wired or wireless connection (not explicitly shown in FIG. 1F)… Col. 20, lines 48-53; The transfer of tags from receiver 1208 to PMD 1212 and the transfer of tags from PMD 1212 to host computer 1214 can be fully automated; that is, receiver 1208 can automatically detect when PMD 1212 is connected thereto and can automatically transfers the tags (including any accumulated tags) whenever a connection is detected)**, play-list information **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an**

advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65) that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio advertisement), etc. When only one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the review is complete, the user may be presented with an opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20)**, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification

information are output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**.

It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Dorogusker with AARTS to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

However, the combination of AARTS and Dorogusker does not specifically disclose comprising a core IMS (Internet Protocol Multimedia Subsystem) part, via the core IMS part.

In an analogous art, Montpetit teaches comprising a core IMS (Internet Protocol Multimedia Subsystem) part **(the core network comprises an IP Multimedia Core Network Subsystem (IMS); Page 2, Paragraph 0018)**, via the core IMS part **(the core network comprises an IMS; Page 2, Paragraph 0018)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Montpetit to the modified system of AARTS and Dorogusker to provide an effective network services and application customization **(Montpetit: Page 1, Paragraph 0013)**.

Regarding **claim 12**, the combination of AARTS and Dorogusker, specifically AARTS teaches wherein: the user equipment comprises **(the user device interpreted as "user equipment"; Page 2, Paragraph 0021)**: a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the service control functions part **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and a content viewing request transmission unit for transmitting **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the media functions part **(the advertisement service interpreted as "the media functions part"; Page 2, Paragraph 0021)**, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**, when connection with the media functions part is established by **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**, and the media functions part comprises a content delivering unit for receiving the main content viewing request transmitted by the user equipment and transmitting to the user equipment main content data identified by the main content

identification information contained in the received main content viewing request **(the advertisement service receives a data request in the store (Fig. 1, element 13a) from the user device in accordance to the user's desired content transmitted by the authentication service, and at step 34 transmits the advertisement information to the user device 10; Page 2, Paragraphs 0021 - 0023)**, and for receiving the sub content viewing request transmitted by the user equipment and transmitting to the user equipment sub content data specified by the selected sub content specification information contained in the received sub content viewing request **(Fig. 3, step 30 shows that the advertisement service receives the data request from the user device, and at step 34 transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

However, the combination of AARTS and Dorogusker does not specifically disclose the core IMS part.

In an analogous art, Montpetit teaches the core IMS part **(the core network comprises an IP Multimedia Core Network Subsystem (IMS); Page 2, Paragraph 0018)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Montpetit to the modified system of AARTS and Dorogusker to provide an effective network services and application customization **(Montpetit: Page 1, Paragraph 0013)**.

Regarding **claim 13**, AARTS discloses wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted

by the media functions part **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, and outputting **(at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

Regarding **claim 14**, AARTS teaches wherein the selected sub content specification information reception unit is configured to receive **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and the content viewing request transmission unit is configured to transmit **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** the main content viewing request and the sub content viewing request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable**

appropriate advertisement information; Page 2, Paragraph 0022) to the media functions part **(the advertisement service ; Page 2, Paragraph 0021)**.

However, AARTS does not specifically disclose the play-list information transmitted by the service control functions part; based on the received play-list information.

In an analogous art, Dorogusker teaches the play-list information transmitted by the service control functions part **(Host computer 1214 can read the stored tags from PMD 1212 and produce a list (e.g., a item list or playlist) of the user's tagged content; Col. 20, lines 41 - 44);** based on the received play-list information **(Host computer 1214 can read the stored tags from PMD 1212 and produce a list (e.g., a item list or playlist) of the user's tagged content; Col. 20, lines 41 - 44)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Dorogusker with AARTS to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 26**, the claim is interpreted and rejected for the same reason as set forth in claim 11.

Regarding **claim 38**, AARTS teaches a content delivery system **(a method of supplying advertising content; Page 1, Paragraph 0001)** comprising an application server system **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph**

0021) and a connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)**, the connection control system for receiving user identification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received user identification information **(the authentication service interpreted as "the connection control system" is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021)**, the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)** comprising: a media functions part for transmitting content data representing content to the user equipment **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** with which connection is established **((Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; a service control functions part for controlling a service provided by the media functions part **(an advertisement server is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and a user profile server functions part for storing profile information of a user of the user equipment **(the user information store (Fig. 1, element 16a) comprise demographic information corresponding to the user; Page 1, Paragraph 0010)**,

and the service control functions part comprising: a delivery request reception unit for receiving **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)** a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**, and a sub content selection unit for selecting sub content data based on user basic or the main content identification information **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**, the user basic information being associated with the user identification information for identifying a user of the user equipment having transmitted the content delivery request, and the main content identification information being contained by the content delivery request **transmitting a data request to the advertisement service in accordance with the metadata, transmitting an authentication request to an authentication server, receiving an authentication response, the authentication response comprising user information, and transmitting advertisement information in accordance with the user information; Page 1, Paragraph 0005)**; and a selected sub content specification information transmission unit for transmitting selected sub content

specification information for specifying the selected sub content data to the user equipment which has transmitted the content delivery request **Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose a core IMS (Internet Protocol Multimedia Subsystem) part; wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Dorogusker teaches wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, to the user equipment which has transmitted the content delivery request **(Col. 10, lines 38-41; PMD 190 can be adapted to connect to a data network, e.g., via wired or wireless connection (not explicitly shown in FIG. 1F)… Col. 20, lines 48-53; The transfer of tags from receiver 1208 to PMD 1212 and the transfer of tags from PMD 1212 to host computer 1214 can be fully automated; that is, receiver 1208**

can automatically detect when PMD 1212 is connected thereto and can automatically transfers the tags (including any accumulated tags) whenever a connection is detected), play-list information **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65)** that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio advertisement), etc. When only one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are**

selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the review is complete, the user may be presented with an opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20), and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**.

It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Dorogusker with AARTS to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

However, the combination of AARTS and Dorogusker does not specifically disclose comprising a core IMS (Internet Protocol Multimedia Subsystem) part, via the core IMS part.

In an analogous art, Montpetit teaches comprising a core IMS (Internet Protocol Multimedia Subsystem) part **(the core network comprises an IP Multimedia Core Network Subsystem (IMS); Page 2, Paragraph 0018)**, via the core IMS part **(the core network comprises an IMS; Page 2, Paragraph 0018)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Montpetit to the modified system of AARTS and Dorogusker to provide an effective network services and application customization **(Montpetit: Page 1, Paragraph 0013)**.

Conclusion

11. **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.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATALI N. PASCUAL PEGUERO whose telephone

number is (571)272-4691. The examiner can normally be reached on Monday - Friday 11:30am - 8:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MARK H. RINEHART can be reached on (571)272-3632. 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 http://pair-direct.uspto.gov. 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.

/MANG YEUNG/
Primary Examiner, Art Unit 2463

/NATALI N PASCUAL PEGUERO/
Examiner, Art Unit 2463

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	Art Unit
	NATALI N PASCUAL PEGUERO	2463

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

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/01/2013	02/20/2014	09/05/2014	03/23/2015	09/02/2015	03/09/2016			
	1	✓	✓	✓	✓	✓	✓			
	2	✓	✓	✓	✓	✓	✓			
	3	✓	✓	✓	-	-	-			
	4	✓	✓	✓	✓	✓	✓			
	5	✓	✓	✓	✓	✓	✓			
	6	✓	✓	✓	✓	✓	✓			
	7	✓	✓	-	-	-	-			
	8	✓	✓	✓	✓	✓	✓			
	9	✓	✓	✓	✓	✓	✓			
	10	✓	✓	✓	✓	✓	✓			
	11	✓	✓	✓	✓	✓	✓			
	12	✓	✓	✓	✓	✓	✓			
	13	✓	✓	✓	✓	✓	✓			
	14	✓	✓	✓	✓	✓	✓			
	15	✓	✓	✓	✓	✓	✓			
	16	✓	✓	✓	✓	✓	✓			
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	18	✓	✓	✓	✓	✓	✓			
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	20	✓	✓	-	-	-	-			
	21	✓	✓	✓	✓	✓	✓			
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	24	✓	✓	✓	✓	✓	✓			
	25	✓	✓	✓	✓	✓	✓			
	26	✓	✓	✓	✓	✓	✓			
	27	✓	✓	✓	✓	✓	✓			
	28	✓	✓	✓	✓	✓	✓			
	29		✓	✓	✓	✓	✓			
	30		✓	✓	✓	✓	✓			
	31		✓	✓	✓	✓	✓			
	32		✓	✓	✓	✓	✓			
	33		✓	✓	✓	✓	✓			
	34		✓	✓	✓	✓	✓			
	35		✓	✓	✓	✓	✓			
	36		✓	✓	✓	✓	✓			

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

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/01/2013	02/20/2014	09/05/2014	03/23/2015	09/02/2015	03/09/2016			
	37			✓	✓	✓	✓			
	38			✓	✓	✓	✓			
	39			✓	✓	✓	✓			
	40			✓	✓	✓	✓			
	41			✓	✓	✓	✓			

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	Art Unit
	NATALI N PASCUAL PEGUERO	2463

CPC- SEARCHED		
Symbol	Date	Examiner
H04L 29/08072, H04L 29/06, H04L 29/0809, H04L 29/08981 and H04L29/08117	2/20/2014	NP

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
709	217,219		

SEARCH NOTES		
Search Notes	Date	Examiner
East Search including keywords,class/subclass,inventor,assignee	5/1/2013	NP
IP.com Patent Search	5/1/2013	NP
Updated Search in EAST	2/20/2014	NP
H04L 29/08072, H04L 29/06, H04L 29/0809, H04L 29/08981 and H04L29/08117 (Text Search only)	2/20/2014	NP
Updated Search in EAST	9/5/2014	NP
Updated Search in EAST	3/23/2015	NP
Updated Search in EAST	9/2/2015	NP
Updated Search in EAST	3/9/2016	NP

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

/NATALI N PASCUAL PEGUERO/ Examiner.Art Unit 2463	

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	53	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:28
L2	40	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:28
L3	243	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:28
L4	44870	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:29
L5	2	1 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:29
L6	2	2 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:29
L7	2	3 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:29
L8	0	4 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:30
L9	3	"20080256216"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:30
L10	2	"8458184".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/09 22:31

S1	1	"13129756"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 12:02
S2	2	"20110225270"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 12:22
S4	4	"2008022298"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 15:13
S6	1	"12099489"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 15:55
S7	4	"10287835"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 16:29
S8	2	"20030105669"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 16:30
S16	2639	((core near2 IMS) or (core near2 (Internet adj Protocol adj Multimedia adj Subsystem)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:56
S17	1275	@ad< "20081118" and S16	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:57
S18	67	S17 and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:57
S19	60	S18 and (user near2 (device or equipment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:58
S23	20	S19 and "370".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:01
S24	20	S16 and S23	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:02

S25	18	S19 and "709".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:07
S26	1	"13063122"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 21:21
S32	21	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:17
S33	173	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:18
S34	36	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:18
S36	10	("20030105669" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:24
S37	40211	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:26
S38	21	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:28
S39	2	S38 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:28
S40	173	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S41	2	S40 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S42	36	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29

S43	2	S42 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S44	908	(Application near2 server) and (connection near2 control) and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:34
S45	502	@ad< "20081118" and S44	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:35
S46	235	S45 and ((user near2 (device or equipment)) and (storage) and (user near2 information))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:36
S47	19	S46 and 709/219,217.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
S48	5409367	(content delivery system).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
S49	2	S48 and S41	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
S50	702	S44 and (delivery)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:38
S51	44	S50 and 709/219,217.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:38
S52	37	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:40
S53	239	((KAZUO) near2 (ASAMI)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:41
S54	49	((KUNIHIRO) near2 (TANIGUCHI)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:41

S55	41734	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:42
S56	2	S52 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S57	2	S53 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S58	2	S54 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S59	0	S55 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S60	12	("20030105669" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:28
S61	2	S60 and attribute	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:28
S62	74272	(H04L29/08072 H04L29/06 H04L29/0809 H04L29/08981 H04L29/08117).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38
S63	3124	S62 and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38
S64	844	S63 and attribute	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38
S65	1509	"I14" and delivery	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:39
S66	14	S65 and (content near2 selection)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:39

S67	1	@ad< "20081118" and S66	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:40
S68	69263	@ad< "20081118" and S62	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:40
S69	159	S68 and (advertisement and (content near2 selection))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:41
S70	37	S69 and (application near2 server)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:41
S71	1	"13129756"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 13:41
S72	39	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:30
S73	241	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:30
S74	50	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:30
S75	42659	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
S77	2	S72 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
S78	2	S73 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
S79	2	S74 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31

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S81	12	("20030105669" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:34
S82	40	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:22
S83	243	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:22
S84	52	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:23
S85	43416	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:23
S86	2	S82 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:23
S87	2	S83 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:23
S89	2	S84 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:24
S90	0	S85 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:24
S91	40	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:12
S92	52	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:12

S93	243	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:12
S94	44046	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:13
S95	2	S91 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:13
S96	2	S92 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:13
S97	2	S93 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:13
S98	16	("8458184" | "20030105669" | "20070186003" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:14
S99	3	S98 and (play$1list)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:14
S100	5042	(advertis$6) with (list or play$1list) with (display$6 output$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:15
S101	548	(advertis$6) with (list or play$1list) with (display$6 output$6) with (user near6 select$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:16
S102	268	@ad< "20081118" and S101	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:16
S103	102	(advertis$6) with (list or play$1list) with (display$6 output$6) with (user near6 select$6) with (broadcas$6 transmit$6 send$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:18
S104	38	@ad< "20081118" and S103	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2015/09/02 22:19

			IBM_TDB			
S105	1	"13129756"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:27
S106	5583	(G06F15/16).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:27
S108	102	S103 and S100	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:28
S109	13	"2010010716"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/03 11:54
S110	5	"20100107162"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/03 11:55

EAST Search History (Interference)

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3/9/2016 10:34:50 PM
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Docket No.: 2207946.00141US1
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Kunihiro Taniguchi	Confirmation No.:	1971
Application No.:	13/129,756	Art Unit:	2463
Filed:	May 17, 2011	Examiner:	N. Pascual Peguero
Title:	CONTENT DELIVERY SYSTEM		

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT IN RESPONSE TO NON-FINAL OFFICE ACTION UNDER 37 C.F.R. § 1.111

Dear Commissioner:

In response to the Office Action dated September 16, 2015, please amend the above-identified U.S. patent 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 30 of this paper.

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Previously Presented) A content delivery system comprising an application server system and a connection control system,

the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information,

the application server system comprising:

a content storage unit for storing sub content data representing sub content and main content data representing main content;

a delivery request reception unit for receiving a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

a sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery

request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

2. (Previously Presented) The content delivery system according to claim 1, wherein:

the user equipment comprises:

a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the application server system; and

a content viewing request transmission unit for transmitting, to the application server system, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system, and

the application server system comprises a content delivering unit for receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by the main content identification information contained in the received main content

viewing request to the user equipment, and for receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by the selected sub content specification information contained in the received sub content viewing request to the user equipment.

3. (Canceled)

4. (Previously Presented) The content delivery system according to claim 1, wherein:

the selected sub content specification information reception unit is configured to receive the play-list information transmitted by the application server system; and

the content viewing request transmission unit is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information.

5. (Previously Presented) The content delivery system according to claim 1, wherein:

the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of sub content represented by the sub content data;

the selection information contains user basic information that is information for specifying the attribute information and is information associated with user identification information for identifying a user of the user equipment; and

the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the user basic information associated with the user

identification information for identifying the user of the user equipment which has transmitted the content delivery request.

6. (Previously Presented) The content delivery system according to claim 1, wherein:

the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of the sub content represented by the sub content data;

the selection information contains content basic information that is information for specifying the attribute information and is information associated with the main content identification information for identifying the main content; and

the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the content basic information associated with the main content identification information contained in the received content delivery request.

7. (Canceled)

8. (Previously Presented) The content delivery system according to claim 1, wherein

the connection control system is configured to establish the connection by exchanging a predetermined connection establishment message with each of the user equipment and the application server system; and

the selected sub content specification information transmission unit is configured to transmit the selected sub content specification information to the user equipment via the connection control

system by incorporating the selected sub content specification information in the connection establishment message.

9. (Previously Presented) The content delivery system according to claim 1, wherein:

the application server system comprises a service control server and a media server; and

the service control server comprises the delivery request reception unit, the sub content selection unit, and the selected sub content specification information transmission unit.

10. (Currently Amended) The content delivery system according to claim 1, wherein:

[[The]]the application server system comprises a service control server and a media server;

the service control server comprises the delivery request reception unit;

the media server comprises the content storage unit, the sub content selection unit, and the selected sub content specification information transmission unit;

the service control server further comprises an selection information transmission unit for transmitting the selection information to the media server via the connection control system;

the media server further comprises an selection information reception unit for receiving the selection information transmitted by the service control server; and

the sub content selection unit is configured to select the sub content data based on the received selection information.

11. (Previously Presented) A content delivery system comprising an application server system and a connection control system,

the connection control system comprising a core IMS (Internet Protocol Multimedia Subsystem) part for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a media functions part for transmitting content data representing content to the user equipment with which connection is established by the core IMS part;

a service control functions part for controlling a service provided by the media functions part; and

a user profile server functions part for storing profile information of a user of the user equipment,

the media functions part comprising a content storage unit for storing sub content data representing sub content and main content data representing main content,

the service control functions part comprising:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the core IMS part; and

an sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content and preliminarily stored by the user profile server functions part, the service control functions part or the connection control system; and

a selected sub content specification information transmission unit for transmitting

selected sub content specification information for specifying the selected sub content data via the core IMS part to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

12. (Previously Presented) The content delivery system according to claim 11, wherein:

the user equipment comprises:

a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the service control functions part; and

a content viewing request transmission unit for transmitting, to the media functions part, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information,

when connection with the media functions part is established by the core IMS part, and

the media functions part comprises a content delivering unit for receiving the main content viewing request transmitted by the user equipment and transmitting to the user equipment main content data identified by the main content identification information contained in the received main content viewing request, and for receiving the sub content viewing request transmitted by the user equipment and transmitting to the user equipment sub content data specified by the selected sub content specification information contained in the received sub content viewing request.

13. (Previously Presented) The content delivery system according to claim 11, wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the media functions part, and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

14. (Previously Presented) The content delivery system according to claim 11, wherein

the selected sub content specification information reception unit is configured to receive the play-list information transmitted by the service control functions part; and

the content viewing request transmission unit is configured to transmit the main content viewing request and the sub content viewing request to the media functions part, based on the received play-list information.

15. (Previously Presented) A content delivery method comprising:

receiving equipment specification information transmitted by user equipment and establishing connection between an application server system and the user equipment based on the received equipment specification information, by a connection control system;

receiving a content delivery request containing main content identification information for identifying main content and transmitted by the user equipment, by the application server system;

selecting sub content data stored in a storing device for storing sub content data representing sub content and main content data representing main content, based on selection information containing attribute information representing an attribute of sub content;

transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, by the application server system; and

transmitting, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output, by the application server system,

wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented

by the sub content data is inserted in main content represented by the main content data.

16. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the selected sub content specification information transmitted by the application server system, by the user equipment;

transmitting, to the application server system, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information, by the user equipment, when connection between the user equipment and the application server system is established by the connection control system; and

receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by main content identification information contained in the received main content viewing request to the user equipment, and receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by selected sub content specification information contained in the received sub content viewing request to the user equipment, by the application server system.

17. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the main content data and the sub content data transmitted by the application server system, and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data, by the user equipment.

18. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the play-list information transmitted by the application server system, by the user equipment; and

transmitting the main content viewing request and the sub content viewing request to the application server system based on the received play-list information, by the user equipment.

19. (Previously Presented) A service control server comprising:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via a connection control system establishing connection between a media server and the user equipment;

an sub content selection unit for selecting sub content data preliminarily stored in a storing device, based on selection information containing attribute information representing an attribute of sub content; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, wherein

the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in

the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

20. (Canceled)

21. (Previously Presented) A user equipment comprising:

a selected sub content specification information reception unit for receiving selected sub content specification information selected based on selection information containing attribute information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application server system, via a connection control system establishing connection between the application server system and the user equipment, wherein the selected sub content specification information reception unit is configured to, when the connection control system executes a process for establishing the connection, receive the play-list information transmitted by the application server system, via the connection control system to the user equipment which has transmitted the content delivery request, wherein the play-list information that is information containing the main content identification information contained in the content

delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output;

a content viewing request transmission unit for transmitting, to the application server system, a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system, wherein the content viewing request transmission unit is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information; and

a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

22. (Canceled)

23. (Canceled)

24. (Previously Presented) The content delivery system according to claim 1, wherein the sub content is advertisement content.

25. (Previously Presented) A content delivery system comprising an application server system and a connection control system,

the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information,

the application server system comprising:

content storage means for storing sub content data representing sub content and main content data representing main content;

delivery request reception means for receiving, a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

sub content selection means for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content; and

selected sub content specification information transmission means for transmitting selected sub content specification information for specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request,

wherein the selected sub content specification information transmission means is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification

information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

26. (Previously Presented) A content delivery system comprising an application server system and a connection control system,

the connection control system comprising a core IMS (Internet Protocol Multimedia Subsystem) part for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a media functions part for transmitting content data representing content to the user equipment with which the connection is established by the core IMS part;

a service control functions part for controlling a service provided by the media functions part; and

a user profile server functions part for storing profile information of a user of the user equipment,

the media functions part comprising content storage means for storing sub content data representing sub content and main content data representing main content,

the service control functions part comprising:

delivery request reception means for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the core IMS part; and

sub content selection means for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content and preliminarily stored by the user profile server functions part, the service control functions part or the connection control system; and

selected sub content specification information transmission means for transmitting selected sub content specification information for specifying the selected sub content data, via the core IMS part to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission means is configured to transmit, when the connection control system executes a process for establishing the connection, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a content outputting unit for receiving main content

data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

27. (Previously Presented) A service control server comprising:

delivery request reception means for receiving a content delivery request containing main content identification information for identifying main content and transmitted by user equipment, via a connection control system establishing connection between a media server and the user equipment;

sub content selection means for selecting sub content data preliminarily stored in a storing device based on selection information containing attribute information representing an attribute of sub content; and

selected sub content specification information transmission means for transmitting selected sub content specification information specifying the selected sub content data, via the connection control system to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission means is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content

specification information are output,

wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

28. (Previously Presented) A user equipment comprising:

selected sub content specification information reception means for receiving selected sub content specification information selected based on selection information containing attribute information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application server system, via a connection control system establishing connection between the application server system and the user equipment, wherein the selected sub content specification information reception means is configured to, when the connection control system executes a process for establishing the connection, receive the play-list information transmitted by the application server system, via the connection control system to the user equipment which has transmitted the content delivery request, wherein the play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output;

content viewing request transmission means for transmitting, to the application server

system, a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information, when connection with the application server system is established by the connection control system, wherein the content viewing request transmission means is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information; and

a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

29. (Currently Amended) A server ~~configured to perform operations~~ comprising:

a memory; and

one or more processors, wherein the one or more processors are configured to:

~~storing~~ store a plurality of sub content data and a plurality of main content data, wherein each of the plurality of sub content data is associated with one or more sub content attributes;

~~receiving~~ receive a content delivery request from a user device, wherein the content delivery request identifies first main content data of the plurality of main content data;

~~selecting~~ select at least first sub content data and second sub content data from the plurality of sub content data based on the first sub content data and the second sub content data being associated with at least a particular attribute of the sub content attributes;

~~transmitting~~ transmit a first choice option corresponding to the first sub content data and a

second choice option corresponding to the second sub content data to the user device; and

~~transmitting~~ transmit play-list information to the user device via a connection established by a connection control system, wherein the play-list information identifies the main content, the first sub content data, the second sub content data, and a sequence in which the main content, the first sub content data, the second sub content data are to be output,

wherein the user ~~equipment~~ device comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

30. (Currently Amended) The server according to claim 29, wherein the ~~server is further configured to perform operations comprising~~one or more processors are further configured to:

~~receiving~~ receive a sub content viewing request from the user device, wherein the sub content viewing request contains a selected choice corresponding to either the first choice option or the second choice option;

~~transmitting~~ transmit the first sub content data to the user device as selected sub content data if the selected choice corresponds to the first choice option;

~~transmitting~~ transmit the second sub content data to the user device as the selected sub content data if the selected choice corresponds to the second choice option; and

~~transmitting~~ transmit the first main content data identified by the content delivery request to the user device.

31. (Previously Presented) The server according to claim 30, wherein a user inputs a selection command to the user device to select the first choice option or the second choice option as the selected choice.

32. (Currently Amended) The server according to claim 30, wherein ~~the server is further configured to perform operations comprising~~one or more processors are further configured to:

~~transmitting~~ transmit the first main content data and the selected sub content data to the user device for viewing on the user device.

33. (Currently Amended) The server according to claim 29, wherein the content delivery request from the user device contains user information about a user of the user device, and

wherein the ~~server is~~ one or more processors are further configured to ~~perform operations comprising selecting~~ select the first sub content data and the second sub content data when the particular attribute corresponds to the user information.

34. (Currently Amended) The server according to claim 30, wherein the content delivery request from the user device contains user information about a user of the user device, and

wherein the ~~server is~~ one or more processors are further configured to ~~perform operations comprising selecting~~ select the first sub content data and the second sub content data when the particular attribute corresponds to the user information.

35. (Currently Amended) The server according to claim 29, wherein the ~~server is~~ one or more

processors are further configured to ~~perform operations comprising~~:

~~associating~~ associate each of the plurality of main content data with one or more main content attributes;

~~selecting~~ select the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content.

36. (Currently Amended) The server according to claim 30, wherein the ~~server is~~ one or more processors are further configured to ~~perform operations comprising~~:

~~associating~~ associate each of the plurality of main content data with one or more main content attributes;

~~selecting~~ select the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content.

37. (Currently amended) A content delivery system comprising an application server system and a connection control system,

the connection control system being configured to receive ~~equipment specification~~ user identification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received ~~equipment specification~~ user identification information,

the application server system comprising:

a delivery request reception unit for receiving a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content, via the connection control system;

a sub content selection unit for selecting the sub content data based on ~~the equipment specification~~ user basic information or the main content identification information, the user basic information being associated with the user identification information for identifying a user of the user equipment having transmitted the content delivery request, and the main content identification information being contained by the content delivery request; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

38. (Currently amended) A content delivery system comprising an application server system and a connection control system,

the connection control system comprising a core IMS (Internet Protocol Multimedia Subsystem) part for receiving ~~equipment specification~~ user identification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received ~~equipment specification~~ user identification information,

the application server system comprising:

a media functions part for transmitting content data representing content to the user equipment with which connection is established by the core IMS part;

a service control functions part for controlling a service provided by the media functions part; and

a user profile server functions part for storing profile information of a user of the user equipment, and

the service control functions part comprising:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the core IMS part; and

~~an~~ a sub content selection unit for selecting ~~the~~ sub content data based on ~~the~~ ~~equipment specification~~ user basic information or the main content identification information, the user basic information being associated with the user identification information for identifying a user of the user equipment having transmitted the content delivery request, and the main content identification information being contained by the content delivery request; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data via the

core IMS part to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

39. (Currently amended) A content delivery method comprising:

receiving ~~equipment specification~~ user identification information transmitted by user equipment and establishing connection between an application server system and the user equipment based on the received ~~equipment specification~~ user identification information, by a connection control system;

receiving a content delivery request containing main content identification information for identifying main content and transmitted by the user equipment, via the connection control system, by the application server system;

selecting sub content data representing sub content based on ~~the equipment specification~~ user basic information or the main content identification information, the user basic information being associated with the user identification information for identifying a user of the user equipment

having transmitted the content delivery request, and the main content identification information being contained by the content delivery request;

~~transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, by the application server system;~~ and

transmitting, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and ~~the~~ selected sub content specification information specifying the selected sub content data, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output, by the application server system.

40. (Currently amended) A non-transitory computer-readable medium storing a ~~computer~~ program comprising instructions for causing a service control server to realize:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via a connection control system establishing connection between a media server and the user equipment;

~~an~~ a sub content selection unit for selecting sub content data based on content basic information associated with the main content identification information contained by the content delivery request; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, ~~and~~ wherein the selected sub content specification information transmission unit for transmitting, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

41. (Currently amended) A service control server comprising:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via a connection control system establishing connection between a media server and the user equipment;

~~an~~ a sub content selection unit for selecting sub content data based on content basic information associated with the main content identification information contained by the content delivery request; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, ~~and~~ wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

REMARKS

Claims 1, 2, 4-6, 8-19, 21 and 24-41 have been examined. Claim 10 was objected to because of informalities. Claims 29-36 were rejected under 35 U.S.C. § 101. Claims 1, 2, 4-6, 8-19, 21, 24-41 were rejected under 35 U.S.C. § 112(b). Claims 1, 2, 4-6, 8-19, 21, 24-41 were rejected under 35 U.S.C. § 103(a).

I. Objection to Claim 10

The Examiner has objected to claim 10 for informalities. Office Action at 2. Applicant submits that the amendments to claim 10 overcome the objection.

II. Rejections of claims 29-36 under 35 U.S.C. § 101

Claims 29-36 were rejected under 35 U.S.C. § 101 as allegedly directed to non-statutory subject matter. Office Action at 3. Applicant submits that the amendments to claims 29-36 overcome the objection.

III. Claims 1, 2, 4-6, 8-19, 21, 24-41 were rejected under 35 U.S.C. § 112(b)

Claims 1, 2, 4-6, 8-19, 21, 24-38, 40 and 41 were rejected under 35 U.S.C. 112(b) as allegedly being infinite. Office Action at 3-4.

A. Claims 29-36

Claims 29-36 were rejected under 35 U.S.C. § 112(b) as allegedly being indefinite. Applicant submits that the amendments to claims 29-36 overcome the rejection.

B. Claims 1-2, 4-6, 8-19, 24, 37, 38, 40 and 41

Claims 1, 11, 19, 37, 38, 40 and 41 were rejected under 35 U.S.C. § 112(b) as allegedly being indefinite. The Office action states that elements "a delivery request reception unit", "a sub content selection unit", "a selected sub content specification information transmission unit" and "a

content outputting unit" allegedly use non-structural term coupled with functional language that invoke 35 U.S.C. 112(f), and that the written description allegedly fails to disclose the corresponding structure, materials, or acts for the claimed function. Additionally, claims 2, 4-6,8-10, 12-14 and 24 were rejected due to their dependency on claims 1 and 11. Applicant respectfully disagrees.

A claim element that does not include the term "means" or "step" triggers a rebuttable presumption that 35 U.S.C. 112(f) or pre-AIA 35 U.S.C. 112, sixth paragraph, does not apply. MPEP § 2181. Here, none of the above elements include the term "means" or "step."

Further, 35 U.S.C. 112(f) or pre-AIA 35 U.S.C. 112, paragraph 6 will not apply if persons of ordinary skill in the art reading the specification understand the term to have a sufficiently definite meaning as the name for the structure that performs the function, even when the term covers a broad class of structures or identifies the structures by their function. MPEP § 2181. The term is not required to denote a specific structure or a precise physical structure to avoid the application of 35 U.S.C. 112(f) or pre-AIA 35 U.S.C. 112, paragraph 6. *See Watts v. XL Sys. Inc.*, 232 F.3d at 880, 56 USPQ2d at 1838; *Inventio AG v. Thyssenkrupp Elevator Americas Corp.*, 649 F.3d 1350, 99 USPQ2d 1112 (Fed. Cir. 2011) (holding that the claim terms "modernizing device" and "computing unit" when read in light of the specification connoted sufficient, definite structure to one of skill in the art to preclude application of 35 U.S.C. 112, sixth paragraph).

Here, persons of ordinary skill in the art reading the specification would understand the term to have a sufficiently definite meaning as the name for the structure that performs the function. For example, "a selected sub content specification information transmission unit" transmits "selected sub content specification information for specifying the selected sub content data via the connection

control system to the user equipment…" Persons of ordinary skill in the art reading the specification would understand that "a selected sub content specification information transmission unit" comprises hardware to transmit electronic signals (e.g., transmit data over a network). Accordingly, persons of ordinary skill in the art reading the specification would understand the term to have a sufficiently definite meaning as the name for the structure that performs the function. For another example, "a sub content selection unit" selects "the stored sub content data…" Persons of ordinary skill in the art reading the specification would understand that "a sub content selection unit" comprises at least one processor and is capable to communicate with a memory (e.g., select the stored data). Accordingly, persons of ordinary skill in the art reading the specification would understand the term to have a sufficiently definite meaning as the name for the structure that performs the function. Therefore, Applicant respectfully submits that none of the above elements invoke 35 U.S.C. 112(f). Consequently, claims 2, 4-6,8-10, 12-14 and 24 do not invoke 35 U.S.C. 112(f) either. Accordingly, Applicant respectfully requests withdrawal of rejections of claims 1-2, 4-6, 8-19, 24, 37, 38, 40 and 41 under 35 U.S.C. 112(b).

C. Claims 2, 12, 14, and 21

Claims 2, 12, 14, and 21 were rejected under 35 U.S.C. 112(b) for elements "a selected sub content specification information reception unit", "a content viewing request transmission unit" and "a content delivering unit" allegedly using non-structural term coupled with functional language that invoke 35 U.S. C. 112(f), and because the written description allegedly fails to disclose the corresponding structure, material, or acts for the claimed function. Applicant respectfully disagrees.

None of the above elements invokes 35 U.S. C. 112(f). Here, none of the elements include the term "means" or "step." As discussed above, each element triggers a rebuttable presumption

that 35 U.S.C. 112(f) does not apply. Further, 35 U.S.C. 112(f) will not apply if persons of ordinary skill in the art reading the specification understand the term to have a sufficiently definite meaning as the name for the structure that performs the function, even when the term covers a broad class of structures or identifies the structures by their function. MPEP § 2181. For example, "a content delivering unit" receives "the main content viewing request…" and transmits "to the user equipment main content data …" Persons of ordinary skill in the art reading the specification would understand that "a content delivering unit" comprises hardware to receive and transmit electronic signal (e.g., receive and transmit data over a network). Accordingly, persons of ordinary skill in the art reading the specification would understand the term to have a sufficiently definite meaning as the name for the structure that performs the function. Applicant respectfully requests withdrawal of rejections of claims 2, 12, 14, and 21 under 35 U.S.C. 112(b).

D. Claim 10

Claim 10 was rejected under 35 U.S.C. 112(b) for elements "an selection information transmission unit", "an selection information reception unit" and "a content delivering unit" allegedly using a non-structural term coupled with functional language that invoke 35 U.S. C. 112(f),and because the written description allegedly fails to disclose the corresponding structure, material, or acts for the claimed function. Applicant respectfully disagrees.

None of the above elements invokes 35 U.S. C. 112(f). Here, none of the elements include the term "means" or "step." As discussed above, each element triggers a rebuttable presumption that 35 U.S.C. 112(f) does not apply. Further, 35 U.S.C. 112(f) will not apply if persons of ordinary skill in the art reading the specification understand the term to have a sufficiently definite meaning as the name for the structure that performs the function, even when the term covers a broad

class of structures or identifies the structures by their function. MPEP § 2181. Applicant also notes that claim 10 does not recite "a content delivering unit". Thus, the rejection of "a content delivering unit" for claim 10 is moot. Accordingly, Applicant respectfully requests withdrawal of rejections of claim 10 under 35 U.S.C. 112(b).

E. Claims 11-14, 26, and 38

Claims 11, 26, and 38 were rejected under 35 U.S.C. 112(b) for elements "a core IMS (Internet Protocol Multimedia Subsystem) part", "a media functions part" and "a service control functions part" allegedly using non-structural term coupled with functional language that invoke 35 U.S.C. 112(f), and because the written description allegedly fails to disclose the corresponding structure, material, or acts for the claimed function. Claims 12-14 were rejected due to their dependency on claim 11. Applicant respectfully disagrees.

None of the above element invoke 35 U.S.C. 112(f). Here, none of the elements include the term "means" or "step." As discussed above, each element triggers a rebuttable presumption that 35 U.S.C. 112(f) does not apply. Further, 35 U.S.C. 112(f) will not apply if persons of ordinary skill in the art reading the specification understand the term to have a sufficiently definite meaning as the name for the structure that performs the function, even when the term covers a broad class of structures or identifies the structures by their function. MPEP § 2181. For example, IMS connotes sufficiently definite structure to persons of ordinary skills in the art. See, e.g., https://en.wikipedia.org/wiki/IP_Multimedia_Subsystem ("The IP Multimedia Subsystem or IP Multimedia Core Network Subsystem (IMS) is an architectural framework for delivering IP multimedia services." Accordingly, persons of ordinary skill in the art reading the specification would understand the term to have a sufficiently definite meaning as the name for the structure that

performs the function. Applicant respectfully requests withdrawal of rejections of claims 11-14, 26, and 38 under 35 U.S.C. 112(b).

F. Claims 15-18 and 25-36

Claims 15 and 25-29 were rejected for element "a content outputting unit" allegedly using a non-structural term coupled with functional language that invoke 35 U.S. C. 112(f), and because the written description allegedly fails to disclose the corresponding structure, material, or acts for the claimed function. Claims 16-18 were rejected due to their dependency on claim 15. Claims 30-36 were rejected due to their dependency on claim 29. Applicant respectfully disagrees.

The term "a content outputting unit" does not invoke 35 U.S.C. 112(f). Here, the term does not include the term "means" or "step." As discussed above, "a content outputting unit" triggers a rebuttable presumption that 35 U.S.C. 112(f) does not apply. Further, 35 U.S.C. 112(f) will not apply if persons of ordinary skill in the art reading the specification understand the term to have a sufficiently definite meaning as the name for the structure that performs the function, even when the term covers a broad class of structures or identifies the structures by their function. MPEP § 2181. Here, "a content outputting unit" receives "main content…" Persons of ordinary skill in the art reading the specification would understand that "a content outputting unit" comprises hardware to receive electronic signals (e.g., receive data over a network). Accordingly, persons of ordinary skill in the art reading the specification would understand the term to have a sufficiently definite meaning as the name for the structure that performs the function. Applicant respectfully requests withdrawal of rejections of claims 15-18 and 25-36 under 35 U.S.C. 112(b).

G. Claims 25-27

Claims 25-27 were rejected under 35 U.S.C. 112(b) for reciting "the connection control system being configured ...", "delivery request reception means ...", "sub content selection means ..." and "selected sub content specification information transmission means ..." allegedly using non-structural terms coupled with functional language that invoke 35 U.S. C. 112(f), and because the written description allegedly fails to disclose the corresponding structure, material, or acts for the claimed function. Applicant respectfully disagrees.

The term "the connection control system" does not invoke 35 U.S.C. 112(f). Here, the term does not include the term "means" or "step." As discussed above, "the connection control system" triggers a rebuttable presumption that 35 U.S.C. 112(f) does not apply. Further, 35 U.S.C. 112(f) will not apply if persons of ordinary skill in the art reading the specification understand the term to have a sufficiently definite meaning as the name for the structure that performs the function, even when the term covers a broad class of structures or identifies the structures by their function. MPEP § 2181. Here, "the connection control system" receives "equipment specification information…" and establishes "connection…" Persons of ordinary skill in the art reading the specification would understand that "the connection control system" comprises hardware to receive electronic signals (e.g., receive data over a network) and establish connection. Accordingly, persons of ordinary skill in the art reading the specification would understand the term to have a sufficiently definite meaning as the name for the structure that performs the function.

Regarding "delivery request reception means" , "sub content selection means" and "selected sub content specification information transmission means", the written description clearly discloses the corresponding structure, material, or acts for the claimed function. For example, for "delivery request reception means," the specification provides "the service control functions part 40 includes

an information transmitter-receiver (*delivery request reception means* and selected advertisement content specification information transmission means) 41." Page 14, lines 23-25 (emphasis added); see also Figure 2. Accordingly, Applicant respectfully requests withdrawal of rejections of claims 25-27 under 35 U.S.C. 112(b).

H. Claim 28

Claim 28 was rejected under 35 U.S.C. 112(b) for reciting "selected sub content specification information reception means ..." and "content viewing request transmission means ... " allegedly using non-structural term coupled with functional language that invoke 35 U.S. C. 112(f), and because the written description allegedly fails to disclose the corresponding structure, material, or acts for the claimed function. Applicant respectfully disagrees.

The written description clearly discloses the corresponding structure, material, or acts for the claimed function. For example, for "content viewing request transmission means," the specification provides "and the *content viewing request transmission means* is configured to transmit the main content viewing request and the advertisement content viewing request to the media functions part, based on the received play-list information." Page 53, lines 3-5 (emphasis added). Accordingly, Applicant respectfully requests withdrawal of rejections of claim 28 under 35 U.S.C. 112(b).

I. Claim 37

Claim 37 was rejected under 35 U.S.C. 112(b) for reciting "the connection control system being configured ..." allegedly using non-structural term coupled with functional language that invoke 35 U.S. C. 112(f), and because the written description allegedly fails to disclose the corresponding structure, material, or acts for the claimed function. Applicant respectfully disagrees.

As discussed above for claims 25-27, "the connection control system" does not invoke 35 U.S.C. 112(f). Here, the term does not include the term "means" or "step." As such, the term "the connection control system" triggers a rebuttable presumption that 35 U.S.C. 112(f) does not apply. Further, 35 U.S.C. 112(f) will not apply if persons of ordinary skill in the art reading the specification understand the term to have a sufficiently definite meaning as the name for the structure that performs the function, even when the term covers a broad class of structures or identifies the structures by their function. MPEP § 2181. Here, "the connection control system" receives "equipment specification information…" and establishes "connection…" Persons of ordinary skill in the art reading the specification would understand that "the connection control system" comprises hardware to receive electronic signals (e.g., receive data over a network) and establish connection. Accordingly, persons of ordinary skill in the art reading the specification would understand the term to have a sufficiently definite meaning as the name for the structure that performs the function.

Accordingly, Applicant respectfully requests withdrawal of rejections of claim 37 under 35 U.S.C. 112(b).

IV. Rejection under 35 USC § 103(a) over U.S. Patent Application Publication No. 2008/0256216 to AARTS ("AARTS") in view of U.S. Patent No. 8,458,184 to Dorogusker et al. ("Dorogusker")

Claims 1, 2, 4-6, 8-10, 15-19, 21, 24, 25, 27-37 and 39-41 were rejected under 35 USC § 103(a) over AARTS in view of Dorogusker. Office Action at 9.

A. Claim 1

Applicant submits that Dorogusker, alone or in combination with AART, does not disclose all of the features of claim 1. For example, claim 1 states a selected sub content specification

information transmission unit is configured to ***transmit*** play-list information containing the selected sub content specification information ***when*** the connection control system executes a process for ***establishing the connection***.

The Examiner asserts that Dorogusker describes this configuration. Specifically, the Examiner asserts that Dorogusker describes receiving delivery relating to advertisement information and displaying an item list relating to advertisement when a user inputs a request. Office Action at 12. Applicant respectfully disagrees.

Dorogusker fails to disclose the timing of transmitting play-list information and establishing the connection. Indeed, the passage cited by the Examiner does not disclose establishing a connection at all. By contrast, claim 1 states the selected sub content specification information transmission unit is configured to ***transmit*** play-list information containing the selected sub content specification information ***when*** the connection control system executes a process for ***establishing the connection***.

The Examiner concedes that AART does not cure the above deficiencies. Office Action at 11.

Accordingly, Applicants submit that claim 1 is patentable for at least the reasons presented above.

B. Claims 2, 4-6, 8-10, and 24

Since claims 2, 4-6, 8-10, and 24 depend on claim 1, they are patentable at least based on their dependency.

C. Claims 15, 19, 21, 25, 27-29, 37, and 39-41

Claims 15, 19, 21, 25, 27-29, 37, and 39-41 contain features that are similar or analogous to those discussed in conjunction with claim 1. Therefore, Applicants submit that these claims are patentable for at least similar or analogous reasons.

D. Claims 16-18 and 30-36

Since claims 16-18 and 30-36 depend on claims 15 and 29, they are patentable at least based on their dependency.

V. Rejection under 35 USC § 103(a) over AARTS in view of Dorogusker and further in view of U.S. Patent Application Publication No. 2007/0223523 to Montpetit et al. ("Montpetit")

Claims 11-14, 26, and 38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over AARTS in view of Dorogusker and further in view of Montpetit. Office Action at 46.

A. Claims 11, 26, and 38

Claims 11, 26, and 38 contain features that are similar or analogous to those discussed in conjunction with claim 1, and since Montpetit does not cure the deficient teachings of AARTS and Dorogusker with respect to claim 1, Applicant submits that claims 11, 26, and 38 are patentable for at least similar reasons.

B. Claims 12-14

Since claims 12-14 depend upon claim 11, and since the Montpetit does not cure the deficient teachings of AARTS and Dorogusker with respect to claim 11, claims 12-14 are patentable at least based on their dependency.

VI. Conclusion

Applicant believes the pending application is in condition for allowance.

If a fee is due, please charge our Deposit Account No. 08-0219, under Order No. 2207946.00141US1 from which the undersigned is authorized to draw.

Respectfully submitted,

Dated: December 17, 2015

/Kelly Zeng/

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PTO/SB/22 (03-13)
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PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)	Docket Number (Optional) 2207946.00141US1
Application Number 13/129,756-Conf. #1971	Filed May 17, 2011
For CONTENT DELIVERY SYSTEM	
Art Unit 2463	Examiner N. Pascual Peguero

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

		Fee	Small Entity Fee	Micro Entity Fee	
[X]	One month (37 CFR 1.17(a)(1))	$200	$100	$50	$ 200.00
[ ]	Two months (37 CFR 1.17(a)(2))	$600	$300	$150	$
[ ]	Three months (37 CFR 1.17(a)(3))	$1,400	$700	$350	$
[ ]	Four months (37 CFR 1.17(a)(4))	$2,200	$1,100	$550	$
[ ]	Five months (37 CFR 1.17(a)(5))	$3,000	$1,500	$750	$

[ ] Applicant asserts small entity status. See 37 CFR 1.27.

[ ] Applicant certifies micro entity status. See 37 CFR 1.29.
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

[ ] A check in the amount of the fee is enclosed.

[X] Payment by credit card. ~~Form PTO-2038 is attached.~~

[ ] The Director has already been authorized to charge fees in this application to a Deposit Account.

[X] The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 08-0219 .

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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.

I am the

[ ] applicant/inventor.

[ ] assignee of record of the entire interest. See 37 CFR 3.71. 37 CFR 3.73(b) statement is enclosed (Form PTO/SB/96).

[X] attorney or agent of record. Registration number 74,361 .

[ ] attorney or agent acting under 37 CFR 1.34. Registration number _____ .

/Kelly Zeng/	December 17, 2015
Signature	Date
Kelly Zeng	(202) 663-6000
Typed or printed name	Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

[ ] * Total of 1 forms are submitted.

150058851

Electronic Patent Application Fee Transmittal

Application Number:	13129756
Filing Date:	17-May-2011
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Filer:	Grant Kelly Rowan/Yvonne Ingram
Attorney Docket Number:	J-11-0248

Filed as Large Entity

Filing Fees for U.S. National Stage under 35 USC 371

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($)
Extension - 1 month with $0 paid	1251	1	200	200
Miscellaneous:				
			Total in USD ($)	**200**

Electronic Acknowledgement Receipt

EFS ID:	24393066
Application Number:	13129756
International Application Number:	
Confirmation Number:	1971
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Customer Number:	71799
Filer:	Grant Kelly Rowan/Yvonne Ingram
Filer Authorized By:	Grant Kelly Rowan
Attorney Docket Number:	J-11-0248
Receipt Date:	17-DEC-2015
Filing Date:	17-MAY-2011
Time Stamp:	15:28:50
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
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Payment was successfully received in RAM	$200
RAM confirmation Number	1529
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		2207946_00141US1_Response_121715.PDF	368788 4f919fdcbaadbf613a7b9da42f164ae26fe9562d	yes	41

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	29
	Applicant Arguments/Remarks Made in an Amendment	30	41

Warnings:					
Information:					
2	Extension of Time	2207946_00141US1_EOT_121715.PDF	146713 c863efd310a670e08c87df63f6f3c8e099ab483b	no	1
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30792 0cddc698d2788a080a03563239439b77a24a04e4	no	2
Warnings:					
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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.

PTO/SB/06 (09-11)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/129,756	Filing Date 05/17/2011	☐ To be Mailed

ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) 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), (i), 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 $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ 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

AMENDMENT **12/17/2015**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 36	Minus	** 41	= 0	X $80 =	0
Independent (37 CFR 1.16(h))	* 15	Minus	***15	= 0	X $420 =	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

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
☐ 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.
** 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 number found in the appropriate box in column 1.

LIE
/KAREN VESTAL/

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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Mr. Ryoichi Harada
2100 Pennsylvania Ave., NW
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Courtesy Reminder for
Application Serial No: 13/129,756

Attorney Docket No: J-11-0248
Customer Number: 71799
Date of Electronic Notification: 09/16/2015

This is a courtesy reminder that new correspondence is available for this application. If you have not done so already, please review the correspondence. The official date of notification of the outgoing correspondence will be indicated on the form PTOL-90 accompanying the correspondence.

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necipca@necam.com
Yuki.Kandathil@necam.com
Ayano.Reid@necam.com

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/129,756	05/17/2011	Kunihiro Taniguchi	J-11-0248	1971

71799 7590 09/16/2015

Mr. Ryoichi Harada
2100 Pennsylvania Ave., NW
SUITE 560
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EXAMINER	
PASCUAL PEGUERO, NATALI	

ART UNIT	PAPER NUMBER
2463	

NOTIFICATION DATE	DELIVERY MODE
09/16/2015	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):

necipca@necam.com
Yuki.Kandathil@necam.com
Ayano.Reid@necam.com

Office Action Summary	Application No. 13/129,756	Applicant(s) TANIGUCHI ET AL.	
	Examiner NATALI N. PASCUAL PEGUERO	Art Unit 2463	AIA (First Inventor to File) 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 *8/10/2015*.

☐ 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) *1,2,4-6,8-19,21 and 24-41* 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) *1,2,4-6,8-19,21 and 24-41* 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 _____ 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 *04/16/2015*.

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

4) ☐ Other: _____.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

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

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on **August 10, 2015** has been entered.

Response to Arguments

3. Applicant's arguments filed in the amendment filed 08/10/2015 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

4. Claim 10 is objected to because of the following informalities: Claim 10, line 2 recites "The" it should recite --the-- instead. Appropriate correction is required.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. **Claim 29** is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claim does not fall within at least one of the four categories of patent eligible subject matter because the claim does not include hardware elements in the body of the claim as required by MPEP 2106(I). **Claim 29** recites a server in the preamble of the claim without any hardware components performing the claimed functions in the body of the claim. The specification does not limit the server to be only hardware and thus it could be just a computer code or software. Note that a server can be software according to the *Computer Desktop Encyclopedia* which states "(2) may refer to both the hardware and software (the entire computer system) or just the software that performs the service".

a. **Claims 30-36** are rejected under 35 U.S.C. 101 as non-statutory for the reason stated above. **Claims 30-36** depend on **claim 29**; however, they do not add any feature or subject matter that would solve any of the non-statutory deficiencies of **claim 29.**

Claim Rejections - 35 USC § 112

7. The following is a quotation of 35 U.S.C. 112(b):

> (b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.
>
> The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:
> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. **Claims 29 and 30-36** are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

a. According to MPEP 2106(I), a machine is defined as "...a concrete thing, consisting of parts, or of certain devices and combination of devices..." The statutory definition of a machine is something that has plural parts. **Claim 29** recites **a single server** which executes all the claimed functions. As such, claim 1 does not recite either a plurality of parts, devices or a combination of devices; thus, the claims appear to be indefinite for lacking adequate structure.

i. **Claims 30-36** are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph for at least the reason stated above. Claims **30-36** depend on claim 29; however, they do not add any feature or subject matter that would solve any of the deficiencies of claim 29.

9. **Claims 1, 2, 4-6, 8-19, 21, 24-38, 40 and 41** are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to

particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

a. Regarding **claims 1, 11, 19, 37, 38, 40 and 41**, elements "a delivery request reception unit", "a sub content selection unit", "a selected sub content specification information transmission unit" and "a content outputting unit" are using non-structural term coupled with functional language that invoke 35 U.S.C. 112(f). However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function.

i. **Claims 2, 4-6, 8-10, 12-14 and 24** depend on **claims 1 and 11** respectively; however, they do not add any feature or subject matter that would solve any of the deficiencies of **claims 1 and 11**.

b. Regarding **claims 2, 12, 14, 21**, elements "a selected sub content specification information reception unit", "a content viewing request transmission unit" and "a content delivering unit" are using non-structural term coupled with functional language that invoke 35 U.S.C. 112(f). However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function.

c. Regarding **claim 10**, elements "an selection information transmission unit", "an selection information reception unit" and "a content delivering unit" are

using non-structural term coupled with functional language that invoke 35 U.S.C. 112(f). However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function.

d. Regarding **claims 11, 26 and 38**, elements "a core IMS (Internet Protocol Multimedia Subsystem) part", "a media functions part" and "a service control functions part" are using non-structural term coupled with functional language that invoke 35 U.S.C. 112(f). However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function.

i. **Claims 12-14** depend on **claim 11**; however, they do not add any feature or subject matter that would solve any of the deficiencies of **claim 11**.

b. Regarding **claim 15 and 25-29**, element "a content outputting unit" is using non-structural term coupled with functional language that invoke 35 U.S.C. 112(f). However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function.

i. **Claims 16-18 and 30-36** depend on **claims 15 and 29** respectively; however, they do not add any feature or subject matter that would solve any of the deficiencies of **claims 15 and 29**.

b. Regarding **claims 25-27**, recite "the connection control system being configured …", "delivery request reception means…", "sub content selection means…" and "selected sub content specification information transmission means…" and is using non-structural term coupled with functional language that invoke 35 U.S.C. 112(f). However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function.

c. Regarding **claim 28**, recites "selected sub content specification information reception means …" and "content viewing request transmission means…" and is using non-structural term coupled with functional language that invoke 35 U.S.C. 112(f). However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function.

d. **Regarding claim 37 (line 3)**, recites "the connection control system being configured …" and is using non-structural term coupled with functional language that invoke 35 U.S.C. 112(f). However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function.

Applicant may:

(a) Amend the claim so that the claim limitation will no longer be interpreted as a limitation under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it expressly recites what structure, material, or acts perform the claimed function without introducing any new matter (35 U.S.C. 132(a)).

If applicant is of the opinion that the written description of the specification already implicitly or inherently discloses the corresponding structure, material, or acts so that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function, applicant should clarify the record by either:

(a) Amending the written description of the specification such that it expressly recites the corresponding structure, material, or acts for performing the claimed function and clearly links or associates the structure, material, or acts to the claimed function, without introducing any new matter (35 U.S.C. 132(a)); or

(b) Stating on the record what the corresponding structure, material, or acts, which are implicitly or inherently set forth in the written description of the specification, perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

Claim Rejections - 35 USC § 103

10. 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 of this title, 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 negatived by the manner in which the invention was made.

11. **Claims 1, 2, 4 - 6, 8 - 10, 15 - 19, 21, 24, 25, 27 - 37 and 39 – 41** are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over AARTS (Pub # US 2008/0256216 A1) in view of Dorogusker et al. (U.S. Patent # 8,458,184 B2 hereinafter Dorogusker).

Regarding **claim 1**, AARTS teaches a content delivery system **(a method of supplying advertising content; Page 1, Paragraph 0001)** comprising an application server system **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** and a connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)**, the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information **(the authentication service interpreted as "the connection control system" is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021)**, the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)** comprising: a content storage unit for storing sub content data representing sub content and main content data representing main content **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), and may also track advertisement data sent to a particular user or device; Page 2, Paragraph 0021)**; a delivery request reception unit for receiving **(the advertisement device is operable to**

receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021) a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**; a sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** via the connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement**

service; Page 2, Paragraph 0022), wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification

information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Dorogusker teaches wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65)** which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the**

product or speaker in a radio advertisement), etc. When only one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the review is complete, the user may be presented with an opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20), and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Dorogusker with AARTS to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content

without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 2**, AARTS discloses wherein: the user equipment comprises **(the user device interpreted as "user equipment"; Page 2, Paragraph 0021)**: a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the application server system **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and a content viewing request transmission unit for transmitting **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**, and the application server system comprises a content delivering unit for receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by the main content identification information contained in the received main content viewing request to the

user equipment **(the advertisement service receives a data request in the store (Fig. 1, element 13a) from the user device in accordance to the user's desired content transmitted by the authentication service, and at step 34 transmits the advertisement information to the user device 10; Page 2, Paragraphs 0021 - 0023)**, and for receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by the selected sub content specification information contained in the received sub content viewing request to the user equipment **(Fig. 3, step 30 shows that the advertisement service receives the data request from the user device, and at step 34 transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding **claim 4,** AARTS teaches wherein: the content viewing request transmission unit is configured to transmit **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** the main content viewing request and the sub content viewing request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)** to the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**.

However, AARTS does not specifically disclose the selected sub content specification information reception unit is configured to receive the play-list information

transmitted by the application server system; based on the received play-list information.

In an analogous art, Dorogusker teaches the selected sub content specification information reception unit is configured to receive the play-list information transmitted by the application server system **(after receiving the user's tags from receiver 1208, PMD 1212 can be connected to host computer 1214. Host computer 1214 can read the stored tags from PMD 1212 and produce a list (e.g., a item list or playlist) of the user's tagged content. Host computer 1214 can also use the digital signature on the tag files to verify that the tags originated from an authenticated receiver and/or as a check on data integrity; Col. 20, lines 41 - 47)**; based on the received play-list information **(Host computer 1214 can read the stored tags from PMD 1212 and produce a list (e.g., a item list or playlist) of the user's tagged content; Col. 20, lines 41 - 44)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Dorogusker with AARTS to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 5**, AARTS discloses wherein: the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of sub content represented by the sub content data **(the**

content service (Fig. 1, element 11) interpreted as "the content storage unit" is configured to store the content information comprising content data to be used in providing an output to the user, and metadata interpreted as to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022); the selection information contains user basic information that is information for specifying the attribute information and is information associated with user identification information for identifying a user of the user equipment **(in the system of Fig. 5, the user device receives content data and metadata, but in this example the metadata comprises a pointer to authentications service, and the fig. 4, step 41 shows that the authentication service identifies the user device from the information transmitted; Page 2, Paragraph 0024 and 0029)**; and the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the user basic information **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)** associated with the user identification information for identifying the user **(at step 33, the advertisement service generates advertisement information in accordance with**

the received authentication information used for identifying the user device; Page 2, Paragraph 0023) of the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**.

Regarding **claim 6**, AARTS discloses wherein: the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of the sub content represented by the sub content data **(the content service (Fig. 1, element 11) interpreted as "the content storage unit" is configured to store the content information comprising content data to be used in providing an output to the user, and metadata to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; the selection information contains content basic information that is information for specifying the attribute information and is information associated with the main content identification information for identifying the main content **(the content information comprising content data to be used in providing an output to the user, and metadata to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; and the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the content basic information associated with the main content identification information **(the authentication service transmits general information thus allowing an advertisement to be personalized to the user, such as age, gender, geographic information or any other information as appropriate. At step 33, the advertisement service generates advertisement**

information in accordance with the received authentication information; Page 2, Paragraph 0023) contained in the received content delivery request **(Fig. 3, step 30 shows that the advertisement service receives the data request from the user device; Page 2, Paragraph 0023)**.

Regarding **claim 8**, AARTS discloses wherein the connection control system is configured to establish the connection by exchanging a predetermined connection establishment message with each of the user equipment and the application server system **(the authentication service interpreted as "the connection control system" is configured to authenticate the user devices verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021)**; and the selected sub content specification information transmission unit is configured to transmit the selected sub content specification information to the user equipment **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** via the connection control system **(the authentication service interpreted as "the connection control system"; Page 2, Paragraph 0021)** by incorporating the selected sub content specification information in the connection establishment message **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information used for establishing connection with the user device; Page 2, Paragraph 0023)**.

Regarding **claim 9**, AARTS discloses wherein: the application server system comprises a service control server and a media server **(an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and the service control server comprises the delivery request reception unit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, the sub content selection unit **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**, and the selected sub content specification information transmission unit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding **claim 10**, AARTS discloses wherein: The application server system comprises a service control server and a media server **(an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; the service control server comprises the delivery request reception unit **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)**; the media server comprises the content storage unit **(the advertisement service stores**

advertisement information in store (Fig. 1, element 13a), the sub content selection unit (Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023), and the selected sub content specification information transmission unit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**; the service control server further comprises an selection information transmission unit for transmitting the selection information to the media server **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information; Page 2, Paragraph 0023)** via the connection control system **(the authentication service interpreted as "the connection control system"; Page 2, Paragraph 0021)**; the media server further comprises an selection information reception unit for receiving the selection information transmitted by the service control server **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and the sub content selection unit is configured to select the sub content data based on the received selection information **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

Regarding **claim 15**, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding **claim 16**, the claim is interpreted and rejected for the same reason as set forth in claim 2.

Regarding **claim 17**, AARTS discloses receiving the main content data and the sub content data transmitted by the application server system **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**, and outputting **(Fig. 2, step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data, by the user equipment **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

Regarding **claim 18**, the claim is interpreted and rejected for the same reason as set forth in claim 4.

Regarding **claim 19**, AARTS teaches a server control server **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** comprising: a delivery request reception unit for receiving a content delivery request containing main content

identification information for identifying main content **(the advertisement device is operable to receive a data request (Fig. 1, element 14) from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)** and transmitted by a user equipment **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** via a connection control system establishing connection between a media server and the user equipment **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; an sub content selection unit for selecting sub content data preliminarily stored in a storing device **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**, based on selection information containing attribute information representing an attribute of sub content **(the content information comprising content data to be used in providing an output to the user, and metadata to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected content data via the connection control system to the user equipment which has transmitted the content delivery request **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user**

device; Page 2, Paragraph 0023), wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification

information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Dorogusker teaches wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65)** that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio**

advertisement), etc. When only one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the review is complete, the user may be presented with an opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20), and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Dorogusker with AARTS to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content

without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 21**, AARTS teaches a user equipment comprising **(the user device interpreted as "user equipment"; Page 2, Paragraph 0021)**: a selected sub content specification information reception unit for receiving selected sub content specification information **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)** selected based on selection information containing attribute information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application server system **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**, via a connection control system establishing connection between the application server system and the user equipment **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; wherein the selected sub content specification information reception unit **(Fig. 2, step**

23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022); a content viewing request transmission unit for transmitting **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**, a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**, wherein the content viewing request transmission unit **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the media functions part **(the advertisement service interpreted as "the media functions part"; Page 2, Paragraph 0021)** is configured to transmit the main content viewing request and the sub content viewing request to the application server system **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**, a content outputting unit for receiving main content data and sub

content data transmitted by the application server system and outputting **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose is configured to, when the connection control system executes a process for establishing the connection, receive the play-list information transmitted by an application server system, via the connection control system to the user equipment which has transmitted the content delivery request, wherein the play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output; based on the received play-list information.

In an analogous art, Dorogusker teaches is configured to, when the connection control system executes a process for establishing the connection, receive the play-list information transmitted by an application server system, via the connection control system to the user equipment which has transmitted the content delivery request **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65)**, wherein the play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio advertisement), etc. When only one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step**

840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the review is complete, the user may be presented with an opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20), and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**; based on the received play-list information **(Host computer 1214 can read the stored tags from PMD 1212 and produce a list (e.g., a item list or playlist) of the user's tagged content; Col. 20, lines 41 - 44)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Dorogusker with AARTS to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content

without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 24**, AARTS discloses wherein the sub content is advertisement content **(advertisement information; Page 1, Paragraph 0005)**.

Regarding **claim 25**, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding **claim 27**, the claim is interpreted and rejected for the same reason as set forth in claim 19.

Regarding **claim 28**, the claim is interpreted and rejected for the same reason as set forth in claim 21.

Regarding **claim 29**, AARTS teaches a server configured to perform operations comprising: storing a plurality of sub content data and a plurality of main content data **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), and may also track advertisement data sent to a particular user or device; Page 2, Paragraph 0021)**, wherein each of the plurality of sub content data is associated with one or more sub content attributes **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user**

information and transmit it to the user device ; Page 1, Paragraph 0013) ; receiving a content delivery request from a user device **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)**, wherein the content delivery request identifies first main content data of the plurality of main content data **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**; selecting at least first sub content data and second sub content data from the plurality of sub content data based on the first sub content data and the second sub content data being associated with at least a particular attribute of the sub content attributes **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**; transmitting a first choice option corresponding to the first sub content data and a second choice option corresponding to the second sub content data to the user device **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph**

0022), based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose transmitting play-list information to the user device via a connection established by a connection control system, wherein the play-list information identifies the main content, the first sub content data, the second sub content data, and a sequence in which the main content, the first sub content data, the second sub content data are to be output.

In an analogous art, Dorogusker teaches transmitting play-list information to the user device via a connection established by a connection control system, wherein the play-list information identifies the main content **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an**

advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65), the first sub content data, the second sub content data, and a sequence in which the main content, the first sub content data, the second sub content data are to be output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Dorogusker with AARTS to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 30**, AARTS discloses wherein the server is further configured to perform operations comprising: receiving a sub content viewing request from the user device, wherein the sub content viewing request contains a selected choice corresponding to either the first choice option or the second choice option **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph**

0022); transmitting the first sub content data to the user device as selected sub content data if the selected choice corresponds to the first choice option; transmitting the second sub content data to the user device as the selected sub content data if the selected choice corresponds to the second choice option **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**; and transmitting the first main content data identified by the content delivery request to the user device **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding **claim 31**, AARTS discloses wherein a user inputs a selection command to the user device to select the first choice option or the second choice option as the selected choice **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**.

Regarding **claim 32**, AARTS discloses wherein the server is further configured to perform operations comprising: transmitting the first main content data and the selected sub content data to the user device for viewing on the user device **(Fig. 3, step 34**

shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023).

Regarding **claim 33**, AARTS discloses wherein the content delivery request from the user device contains user information about a user of the user device **(the user information store (Fig. 1, element 16a) comprise demographic information corresponding to the user; Page 1, Paragraph 0010)**, and wherein the server is further configured to perform operations comprising selecting the first sub content data and the second sub content data when the particular attribute corresponds to the user information **(an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**.

Regarding **claim 34**, the claim is interpreted and rejected for the same reason as set forth in claim 33.

Regarding **claim 35**, AARTS discloses wherein the server is further configured to perform operations comprising: associating each of the plurality of main content data with one or more main content attributes **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … Fig. 3, step 33 shows that the authentication service generates advertisement information in**

accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023); selecting the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**.

Regarding **claim 36**, the claim is interpreted and rejected for the same reason as set forth in claim 35.

Regarding **claim 37**, AARTS teaches a content delivery system **(a method of supplying advertising content; Page 1, Paragraph 0001)** comprising an application server system **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** and a connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)**, the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information **(the authentication service interpreted as "the connection control system" is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page**

2, Paragraph 0021), the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)** comprising: a delivery request reception unit for receiving **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)** a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**; a sub content selection unit for selecting the sub content data based on the equipment specification information or the main content identification information **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** via the connection control system **(an**

authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021) to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**.

However, AARTS does not specifically disclose wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Dorogusker teaches wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while**

PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65) which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio advertisement), etc. When only one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the review is complete, the user may be presented with an opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 –**

67 and Col. 18, lines 1 – 20), and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Dorogusker with AARTS to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 39**, the claim is interpreted and rejected for the same reason as set forth in claim 37.

Regarding **claim 40**, AARTS teaches a non-transitory computer program comprising instructions for causing a service control server to realize: a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content **(the advertisement device is operable to receive a data request (Fig. 1, element 14) from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)** and transmitted by a user

equipment **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** via a connection control system establishing connection between a media server and the user equipment **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; an sub content selection unit for selecting content data based on the main content identification information **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose the selected sub content specification information transmission unit for transmitting, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the

main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Dorogusker teaches the selected sub content specification information transmission unit for transmitting, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65)** that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio**

advertisement), etc. When only one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the review is complete, the user may be presented with an opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20), and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Dorogusker with AARTS to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content

without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 41**, the claim is interpreted and rejected for the same reason as set forth in claim 40.

12. **Claims 11 - 14, 26 and 38** are rejected under 35 U.S.C. 103(a) as being unpatentable over AARTS in view of Dorogusker, and further in view of Montpetit et al. (Pub # US 2007/0223523 A1 hereinafter Montpetit).

Regarding **claim 11**, AARTS teaches a content delivery system **(a method of supplying advertising content; Page 1, Paragraph 0001)** comprising an application server system **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** and a connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)**, the connection control system for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information **(the authentication service interpreted as "the connection control system" is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021)**, the application server system comprising **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**: a media functions part for transmitting content data representing content to the user equipment

(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023) with which the connection is established **((Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; a service control functions part for controlling a service provided by the media functions part **(an advertisement server is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and a user profile server functions part for storing profile information of a user of the user equipment **(the user information store (Fig. 1, element 16a) comprise demographic information corresponding to the user; Page 1, Paragraph 0010)**, the media functions part comprising a content storage unit for storing sub content data representing sub content and main content data representing main content **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), and may also track advertisement data sent to a particular user or device; Page 2, Paragraph 0021)**, the service control functions part comprising: a delivery request reception unit for receiving **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)** a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment content **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information;**

Page 2, Paragraphs 0021 - 0022); and an sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)** and preliminarily stored by the user profile server functions part **(Fig. 2, step 21 shows that the user device receives data including content information from the content service; Page 2, Paragraph 0022)**, the service control functions part or the connection control system **(the authentication service interpreted as "the connection control system"; Page 2, Paragraph 0021)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data to the user equipment which has transmitted the content delivery request **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content**

data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022), viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose a core IMS (Internet Protocol Multimedia Subsystem) part; wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Dorogusker teaches wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, to the user equipment which has transmitted the content delivery request, play-list information **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820,**

PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65) that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio advertisement), etc. When only one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the review is complete, the user may be presented**

with an opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20), and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65)**.

It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Dorogusker with AARTS to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

However, the combination of AARTS and Dorogusker does not specifically disclose comprising a core IMS (Internet Protocol Multimedia Subsystem) part, via the core IMS part.

In an analogous art, Montpetit teaches comprising a core IMS (Internet Protocol Multimedia Subsystem) part **(the core network comprises an IP Multimedia Core Network Subsystem (IMS); Page 2, Paragraph 0018)**, via the core IMS part **(the core network comprises an IMS; Page 2, Paragraph 0018)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Montpetit to the modified system of AARTS and Dorogusker to provide an effective network services and application customization **(Montpetit: Page 1, Paragraph 0013)**.

Regarding **claim 12**, the combination of AARTS and Dorogusker, specifically AARTS teaches wherein: the user equipment comprises **(the user device interpreted as "user equipment"; Page 2, Paragraph 0021)**: a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the service control functions part **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and a content viewing request transmission unit for transmitting **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the media functions part **(the advertisement service interpreted as "the media functions part"; Page 2, Paragraph 0021)**, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**, when connection with the media functions part is established by **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication**

server in order to establish connection with the advertisement service; Page 2, Paragraph 0023), and the media functions part comprises a content delivering unit for receiving the main content viewing request transmitted by the user equipment and transmitting to the user equipment main content data identified by the main content identification information contained in the received main content viewing request **(the advertisement service receives a data request in the store (Fig. 1, element 13a) from the user device in accordance to the user's desired content transmitted by the authentication service, and at step 34 transmits the advertisement information to the user device 10; Page 2, Paragraphs 0021 - 0023)**, and for receiving the sub content viewing request transmitted by the user equipment and transmitting to the user equipment sub content data specified by the selected sub content specification information contained in the received sub content viewing request **(Fig. 3, step 30 shows that the advertisement service receives the data request from the user device, and at step 34 transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

However, the combination of AARTS and Dorogusker does not specifically disclose the core IMS part.

In an analogous art, Montpetit teaches the core IMS part **(the core network comprises an IP Multimedia Core Network Subsystem (IMS); Page 2, Paragraph 0018)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Montpetit to the modified

system of AARTS and Dorogusker to provide an effective network services and application customization **(Montpetit: Page 1, Paragraph 0013)**.

Regarding **claim 13**, AARTS discloses wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the media functions part **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, and outputting **(at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

Regarding **claim 14**, AARTS teaches wherein the selected sub content specification information reception unit is configured to receive **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and the content viewing request transmission unit is configured to transmit **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** the main content

viewing request and the sub content viewing request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)** to the media functions part **(the advertisement service ; Page 2, Paragraph 0021)**.

However, AARTS does not specifically disclose the play-list information transmitted by the service control functions part; based on the received play-list information.

In an analogous art, Dorogusker teaches the play-list information transmitted by the service control functions part **(Host computer 1214 can read the stored tags from PMD 1212 and produce a list (e.g., a item list or playlist) of the user's tagged content; Col. 20, lines 41 - 44);** based on the received play-list information **(Host computer 1214 can read the stored tags from PMD 1212 and produce a list (e.g., a item list or playlist) of the user's tagged content; Col. 20, lines 41 - 44)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Dorogusker with AARTS to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

Regarding **claim 26**, the claim is interpreted and rejected for the same reason as set forth in claim 11.

Regarding **claim 38**, AARTS teaches a content delivery system **(a method of supplying advertising content; Page 1, Paragraph 0001)** comprising an application server system **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** and a connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)**, the connection control system for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information **(the authentication service interpreted as "the connection control system" is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021)**, the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)** comprising: a media functions part for transmitting content data representing content to the user equipment **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** with which connection is established **((Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; a service control functions part for controlling a service provided by the media functions part **(an advertisement server is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1,**

Paragraph 0013); and a user profile server functions part for storing profile information of a user of the user equipment **(the user information store (Fig. 1, element 16a) comprise demographic information corresponding to the user; Page 1, Paragraph 0010)**, and the service control functions part comprising: a delivery request reception unit for receiving **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)** a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**, and an sub content selection unit for selecting the sub content data based on the equipment specification information or the main content identification information **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data to the user equipment which has transmitted the content delivery request **Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose a core IMS (Internet Protocol Multimedia Subsystem) part; wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Dorogusker teaches wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, to the user equipment which has transmitted the content delivery request, play-list information **(In step 810, PMD 102 receives a broadcast associated with an advertisement of a product. A product may be a tangible or intangible good or a service. In step 820, PMD 102 receives input indicating a user's desire to tag the advertisement. PMD 102 may accept a user input while PMD is receiving or providing the advertisement to the user. The user input can indicate to the media device the user's desire to tag the advertisement and/or the user's interest in the content being advertised. In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed. When multiple**

items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 49 – 65) that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(The list of items may include, for example, one or more products, one or more background songs, one or more objects used in the advertisement (e.g., a particular car can be used to advertise automobile insurance, etc.), a celebrity shown or associated with the advertisement (e.g., a known spokes model of the product or speaker in a radio advertisement), etc. When only one item is associated with the advertisement, PMD 102 may present a list that includes the only item or PMD 102 may omit step 840 from the process. In step 850, PMD 102 receives input indicative of one or more of the listed items. When the items are selected, the user may be provided with an opportunity to review the selected items or tagged advertisement or immediately purchase the selected item(s) or tagged advertisement. If user elects to review in step 860, the process can move to step 870, which allows the user to review the selected items or tagged advertisement. After the review is complete, the user may be presented with an opportunity to purchase the items or advertisement in step 880; Col. 17, lines 65 – 67 and Col. 18, lines 1 – 20)**, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(In step 830, an advertisement tag is generated. In step 840, one or more items associated with the advertisement are displayed.**

When multiple items are associated with the advertisement, a list of the items may be displayed in step 840; Col. 17, lines 62 – 65).

It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Dorogusker with AARTS to provide opportunity to users where they can purchase an item, requests to delivery service in real time and obtain information about content and/or purchase the content without waiting to synchronize with a host computer system **(Dorogusker: Col. 21, lines 13 - 19)**.

However, the combination of AARTS and Dorogusker does not specifically disclose comprising a core IMS (Internet Protocol Multimedia Subsystem) part, via the core IMS part.

In an analogous art, Montpetit teaches comprising a core IMS (Internet Protocol Multimedia Subsystem) part **(the core network comprises an IP Multimedia Core Network Subsystem (IMS); Page 2, Paragraph 0018)**, via the core IMS part **(the core network comprises an IMS; Page 2, Paragraph 0018)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Montpetit to the modified system of AARTS and Dorogusker to provide an effective network services and application customization **(Montpetit: Page 1, Paragraph 0013)**.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATALI N. PASCUAL PEGUERO whose telephone

number is (571)272-4691. The examiner can normally be reached on Monday - Friday 11:30am - 8:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MARK H. RINEHART can be reached on (571)272-3632. 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 http://pair-direct.uspto.gov. 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.

/NATALI N PASCUAL PEGUERO/
Examiner, Art Unit 2463

/MARK RINEHART/
Supervisory Patent Examiner, Art Unit 2463

Notice of References Cited	Application/Control No. 13/129,756	Applicant(s)/Patent Under Reexamination TANIGUCHI ET AL.	
	Examiner NATALI N. PASCUAL [illegible]	Art Unit 2463	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-8,458,184 B2	06-2013	Dorogusker; Jesse Lee	G06Q30/0241	707/740
	B	US-				
	C	US-				
	D	US-				
	E	US-				
	F	US-				
	G	US-				
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FOREIGN PATENT DOCUMENTS

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(Not for submission under 37 CFR 1.99)

Application Number	13129756
Filing Date	2011-05-17
First Named Inventor	Kunihiro Taniguchi
Art Unit	~~2413~~ 2463
Examiner Name	PASCUAL PEGUERO, NATALI
Attorney Docket Number	J-11-0248

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	1	20070186003	A1	2007-08-09	Michael Foster et al	Cited in JPOA.

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	1	2007-528680	JP	A	2007-10-11	SCHILLER,Jay,B. et al	English Abstract from WO2005086865 Cited in JPOA.	☒
	2	2005-012655	JP	A	2005-01-13	AZUMA TSUTOMU et al	English Abstract Cited in JPOA.	☒

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First Named Inventor	Kunihiro Taniguchi
Art Unit	~~2413~~ 2463
Examiner Name	PASCUAL PEGUERO, NATALI
Attorney Docket Number	J-11-0248

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	Japanese Office Action for JP Application No. 2014-087402 mailed on March 31, 2015.	☐

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EXAMINER SIGNATURE

Examiner Signature	/Natali Pascual Peguero/	Date Considered	09/02/2015

*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.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

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Art Unit	~~2413~~ 2463
Examiner Name	PASCUAL PEGUERO, NATALI
Attorney Docket Number	J-11-0248

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	/ Carl J Pellegrini /	Date (YYYY-MM-DD)	2015-04-16
Name/Print	Carl J Pellegrini	Registration Number	40766

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.**

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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.

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Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	Art Unit
	NATALI N PASCUAL PEGUERO	2463

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

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/01/2013	02/20/2014	09/05/2014	03/23/2015	09/02/2015				
1	1	✓	✓	✓	✓	✓				
2	2	✓	✓	✓	✓	✓				
3	3	✓	✓	✓	-	-				
4	4	✓	✓	✓	✓	✓				
5	5	✓	✓	✓	✓	✓				
6	6	✓	✓	✓	✓	✓				
7	7	✓	✓	-	-	-				
8	8	✓	✓	✓	✓	✓				
9	9	✓	✓	✓	✓	✓				
10	10	✓	✓	✓	✓	✓				
11	11	✓	✓	✓	✓	✓				
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21	21	✓	✓	✓	✓	✓				
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26	26	✓	✓	✓	✓	✓				
27	27	✓	✓	✓	✓	✓				
28	28	✓	✓	✓	✓	✓				
29	29		✓	✓	✓	✓				
30	30		✓	✓	✓	✓				
31	31		✓	✓	✓	✓				
32	32		✓	✓	✓	✓				
33	33		✓	✓	✓	✓				
34	34		✓	✓	✓	✓				
35	35		✓	✓	✓	✓				
36	36		✓	✓	✓	✓				

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	Art Unit
	NATALI N PASCUAL PEGUERO	2463

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

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/01/2013	02/20/2014	09/05/2014	03/23/2015	09/02/2015				
37	37			✓	✓	✓				
38	38			✓	✓	✓				
39	39			✓	✓	✓				
40	40			✓	✓	✓				
41	41			✓	✓	✓				

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	40	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:12
L2	52	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:12
L3	243	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:12
L4	44046	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:13
L5	2	1 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:13
L6	2	2 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:13
L7	2	3 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:13
L8	16	("8458184" | "20030105669" | "20070186003" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:14
L9	3	8 and (play$1list)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:14
L10	5042	(advertis$6) with (list or play$1list) with (display$6 output$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2015/09/02 22:15

			IBM_TDB			
L11	548	(advertis$6) with (list or play$1list) with (display$6 output$6) with (user near6 select$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:16
L12	268	@ad< "20081118" and 11	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:16
L13	102	(advertis$6) with (list or play$1list) with (display$6 output$6) with (user near6 select$6) with (broadcas$6 transmit$6 send$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:18
L14	38	@ad< "20081118" and 13	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:19
L15	1	"13129756"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:27
L16	5583	(G06F15/16).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:27
L18	102	13 and 10	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/02 22:28
S1	1	"13129756"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 12:02
S2	2	"20110225270"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 12:22
S4	4	"2008022298"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 15:13
S6	1	"12099489"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 15:55
S7	4	"10287835"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2013/04/23 16:29

			IBM_TDB			
S8	2	"20030105669"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 16:30
S16	2639	((core near2 IMS) or (core near2 (Internet adj Protocol adj Multimedia adj Subsystem)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:56
S17	1275	@ad< "20081118" and S16	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:57
S18	67	S17 and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:57
S19	60	S18 and (user near2 (device or equipment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:58
S23	20	S19 and "370".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:01
S24	20	S16 and S23	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:02
S25	18	S19 and "709".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:07
S26	1	"13063122"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 21:21
S32	21	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:17
S33	173	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:18
S34	36	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2013/05/01 23:18

			IBM_TDB			
S36	10	("20030105669" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:24
S37	40211	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:26
S38	21	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:28
S39	2	S38 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:28
S40	173	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S41	2	S40 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S42	36	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S43	2	S42 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S44	908	(Application near2 server) and (connection near2 control) and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:34
S45	502	@ad< "20081118" and S44	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:35
S46	235	S45 and ((user near2 (device or equipment)) and (storage) and (user near2 information))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:36
S47	19	S46 and 709/219,217.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2013/05/01 23:37

			IBM_TDB			
S48	5409367	(content delivery system).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
S49	2	S48 and S41	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
S50	702	S44 and (delivery)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:38
S51	44	S50 and 709/219,217.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:38
S52	37	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:40
S53	239	((KAZUO) near2 (ASAMI)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:41
S54	49	((KUNIHIRO) near2 (TANIGUCHI)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:41
S55	41734	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:42
S56	2	S52 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S57	2	S53 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S58	2	S54 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S59	0	S55 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2014/02/20 14:51

			IBM_TDB			
S60	12	("20030105669" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:28
S61	2	S60 and attribute	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:28
S62	74272	(H04L29/08072 H04L29/06 H04L29/0809 H04L29/08981 H04L29/08117).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38
S63	3124	S62 and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38
S64	844	S63 and attribute	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38
S65	1509	"l14" and delivery	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:39
S66	14	S65 and (content near2 selection)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:39
S67	1	@ad< "20081118" and S66	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:40
S68	69263	@ad< "20081118" and S62	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:40
S69	159	S68 and (advertisement and (content near2 selection))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:41
S70	37	S69 and (application near2 server)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:41
S71	1	"13129756"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2014/09/05 13:41

			IBM_TDB			
S72	39	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:30
S73	241	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:30
S74	50	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:30
S75	42659	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
S77	2	S72 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
S78	2	S73 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
S79	2	S74 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
S80	0	S75 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
S81	12	("20030105669" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:34
S82	40	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:22
S83	243	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:22
S84	52	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2015/03/23 01:23

			IBM_TDB			
S85	43416	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:23
S86	2	S82 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:23
S87	2	S83 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:23
S89	2	S84 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:24
S90	0	S85 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:24

EAST Search History (Interference)

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9/2/2015 10:28:39 PM
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Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	Art Unit
	NATALI N PASCUAL PEGUERO	2463

CPC- SEARCHED		
Symbol	Date	Examiner
H04L 29/08072, H04L 29/06, H04L 29/0809, H04L 29/08981 and H04L29/08117	2/20/2014	NP

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
709	217,219		

SEARCH NOTES		
Search Notes	Date	Examiner
East Search including keywords,class/subclass,inventor,assignee	5/1/2013	NP
IP.com Patent Search	5/1/2013	NP
Updated Search in EAST	2/20/2014	NP
H04L 29/08072, H04L 29/06, H04L 29/0809, H04L 29/08981 and H04L29/08117 (Text Search only)	2/20/2014	NP
Updated Search in EAST	9/5/2014	NP
Updated Search in EAST	3/23/2015	NP
Updated Search in EAST	9/2/2015	NP

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

/NATALI N PASCUAL PEGUERO/ Examiner.Art Unit 2463	

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
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REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	13129756	Filing Date	2011-05-17	Docket Number (if applicable)	2207946.00141US1	Art Unit	2413
First Named Inventor	Taniguchi KUNIHIRO			Examiner Name	N. Pascual Peguero		

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. The Instruction Sheet for this form is located at WWW.USPTO.GOV

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).

☐ 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.

- ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ☐ Other _____

☒ Enclosed

- ☒ Amendment/Reply
- ☐ Information Disclosure Statement (IDS)
- ☐ Affidavit(s)/ Declaration(s)
- ☒ Other Petition for Extension of Time

MISCELLANEOUS

☐ 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)

☐ Other _____

FEES

☒ **The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**
The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 08-0219

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

☐ Applicant Signature

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
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Signature of Registered U.S. Patent Practitioner			
Signature	/Haixia Lin/	Date (YYYY-MM-DD)	2015-08-10
Name	Haixia Lin	Registration Number	61318

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.

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

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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 Patent Application Fee Transmittal

Application Number:	13129756
Filing Date:	17-May-2011
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Filer:	Michael Hal Smith/Lisa Morris
Attorney Docket Number:	J-11-0248

Filed as Large Entity

Filing Fees for U.S. National Stage under 35 USC 371

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($)
Extension - 1 month with $0 paid	1251	1	200	200
Miscellaneous:				
RCE- 2nd and Subsequent Request	1820	1	1700	1700
		Total in USD ($)		**1900**

Electronic Acknowledgement Receipt

EFS ID:	23158532
Application Number:	13129756
International Application Number:	
Confirmation Number:	1971
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Customer Number:	71799
Filer:	Michael Hal Smith/Lisa Morris
Filer Authorized By:	Michael Hal Smith
Attorney Docket Number:	J-11-0248
Receipt Date:	10-AUG-2015
Filing Date:	17-MAY-2011
Time Stamp:	15:55:00
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$1900
RAM confirmation Number	2644
Deposit Account	080219
Authorized User	ROWAN, GRANT K.

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. 1.492 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

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Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Extension of Time	2207946_00141US1_Petition_for_Extension_of_Time.PDF	77064 59ee465ef6c13589092163a96cf4c6d53ab338ef	no	1
Warnings:					
Information:					
2		2207946_00141US1__Response_to_Final_Office_Action_with_RCE.PDF	193811 113c1079a8d2aab160ae45c1fed55867c52b0f11	yes	35

Multipart Description/PDF files in .zip description		
Document Description	**Start**	**End**
Amendment Submitted/Entered with Filing of CPA/RCE	1	1
Claims	2	30
Applicant Arguments/Remarks Made in an Amendment	31	35

Warnings:					
Information:					
3	Request for Continued Examination (RCE)	2207946_00141US1_Request_for_Continued_Examination.PDF	697788 054351cfef2385f17fbb7ab1a102b6774ca4b1a6	no	3
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	32482 ba0f54956080b2ccb7c29c9fc5c6f5423b349d13	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1001145		

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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.

PTO/AIA/22 (03-13)
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PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)	Docket Number (Optional) 2207946.00141US1
Application Number 13/129,756-Conf. #1971	Filed May 17, 2011
For CONTENT DELIVERY SYSTEM	
Art Unit 2413	Examiner N. Pascual Peguero

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

	Fee	Small Entity Fee	Micro Entity Fee	
[X] One month (37 CFR 1.17(a)(1))	$200	$100	$50	$ 200.00
[ ] Two months (37 CFR 1.17(a)(2))	$600	$300	$150	$
[ ] Three months (37 CFR 1.17(a)(3))	$1,400	$700	$350	$
[ ] Four months (37 CFR 1.17(a)(4))	$2,200	$1,100	$550	$
[ ] Five months (37 CFR 1.17(a)(5))	$3,000	$1,500	$750	$

[ ] Applicant asserts small entity status. See 37 CFR 1.27.

[ ] Applicant certifies micro entity status. See 37 CFR 1.29.
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

[ ] A check in the amount of the fee is enclosed.

[X] Payment by credit card. Form PTO-2038 is attached.

[ ] The Director has already been authorized to charge fees in this application to a Deposit Account.

[X] The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 08-0219 .

[X] Payment made via 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.

I am the

[ ] applicant.

[X] attorney or agent of record. Registration number 71,190 .

[ ] attorney or agent acting under 37 CFR 1.34. Registration number _____ .

/Michael Smith/	August 10, 2015
Signature	Date
Michael H. Smith	(202) 663-6000
Typed or printed name	Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

[ ] * Total of 1 forms are submitted.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Kunihiro Taniguchi et al.	Confirmation No.:	1971
Application No.:	13/129,756	Art Unit:	2413
Filed:	May 17, 2011	Examiner:	N. Pascual Peguero
Title:	CONTENT DELIVERY SYSTEM		

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO FINAL OFFICE ACTION WITH REQUEST FOR CONTINUED EXAMINATION

Dear Examiner:

In response to the Office Action dated April 8, 2015, Applicants submit the following remarks. Applicants submit herewith a petition for a one-month extension of time. As August 8, 2015 is a Saturday, this response is timely filed on Monday, August 10, 2015.

Pending Claims begin on page 2 of this paper.

Remarks/Arguments begin on page 31 of this paper.

PENDING CLAIMS

Please amend the claims as follows:

1. (Previously Presented) A content delivery system comprising an application server system and a connection control system,

the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information,

the application server system comprising:

a content storage unit for storing sub content data representing sub content and main content data representing main content;

a delivery request reception unit for receiving a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

a sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via

the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

2. (Previously Presented) The content delivery system according to claim 1, wherein:

the user equipment comprises:

a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the application server system; and

a content viewing request transmission unit for transmitting, to the application server system, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system, and

the application server system comprises a content delivering unit for receiving the main

content viewing request transmitted by the user equipment and transmitting main content data identified by the main content identification information contained in the received main content viewing request to the user equipment, and for receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by the selected sub content specification information contained in the received sub content viewing request to the user equipment.

3. (Canceled)

4. (Previously Presented) The content delivery system according to claim 1, wherein:

the selected sub content specification information reception unit is configured to receive the play-list information transmitted by the application server system; and

the content viewing request transmission unit is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information.

5. (Previously Presented) The content delivery system according to claim 1, wherein:

the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of sub content represented by the sub content data;

the selection information contains user basic information that is information for specifying the attribute information and is information associated with user identification information for

identifying a user of the user equipment; and

the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the user basic information associated with the user identification information for identifying the user of the user equipment which has transmitted the content delivery request.

6. (Previously Presented) The content delivery system according to claim 1, wherein:

the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of the sub content represented by the sub content data;

the selection information contains content basic information that is information for specifying the attribute information and is information associated with the main content identification information for identifying the main content; and

the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the content basic information associated with the main content identification information contained in the received content delivery request.

7. (Canceled)

8. (Previously Presented) The content delivery system according to claim 1, wherein

the connection control system is configured to establish the connection by exchanging a

predetermined connection establishment message with each of the user equipment and the application server system; and

the selected sub content specification information transmission unit is configured to transmit the selected sub content specification information to the user equipment via the connection control system by incorporating the selected sub content specification information in the connection establishment message.

9. (Previously Presented) The content delivery system according to claim 1, wherein:

the application server system comprises a service control server and a media server; and

the service control server comprises the delivery request reception unit, the sub content selection unit, and the selected sub content specification information transmission unit.

10. (Previously Presented) The content delivery system according to claim 1, wherein:

The application server system comprises a service control server and a media server;

the service control server comprises the delivery request reception unit;

the media server comprises the content storage unit, the sub content selection unit, and the selected sub content specification information transmission unit;

the service control server further comprises an selection information transmission unit for transmitting the selection information to the media server via the connection control system;

the media server further comprises an selection information reception unit for receiving the selection information transmitted by the service control server; and

the sub content selection unit is configured to select the sub content data based on the received selection information.

11. (Previously Presented) A content delivery system comprising an application server system and a connection control system,

the connection control system comprising a core IMS (Internet Protocol Multimedia Subsystem) part for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a media functions part for transmitting content data representing content to the user equipment with which connection is established by the core IMS part;

a service control functions part for controlling a service provided by the media functions part; and

a user profile server functions part for storing profile information of a user of the user equipment,

the media functions part comprising a content storage unit for storing sub content data representing sub content and main content data representing main content,

the service control functions part comprising:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the core IMS part; and

an sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content and preliminarily stored by the user profile server functions part, the service control functions part or the connection control system; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data via the core IMS part to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the

received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

12. (Previously Presented) The content delivery system according to claim 11, wherein:

the user equipment comprises:

a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the service control functions part; and

a content viewing request transmission unit for transmitting, to the media functions part, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information, when connection with the media functions part is established by the core IMS part, and

the media functions part comprises a content delivering unit for receiving the main content viewing request transmitted by the user equipment and transmitting to the user equipment main content data identified by the main content identification information contained in the received main content viewing request, and for receiving the sub content viewing request transmitted by the user equipment and transmitting to the user equipment sub content data specified by the selected sub content specification information contained in the received sub content viewing request.

13. (Previously Presented) The content delivery system according to claim 11, wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the media functions part, and outputting, based on the received main content data and

sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

14. (Previously Presented) The content delivery system according to claim 11, wherein

the selected sub content specification information reception unit is configured to receive the play-list information transmitted by the service control functions part; and

the content viewing request transmission unit is configured to transmit the main content viewing request and the sub content viewing request to the media functions part, based on the received play-list information.

15. (Previously Presented) A content delivery method comprising:

receiving equipment specification information transmitted by user equipment and establishing connection between an application server system and the user equipment based on the received equipment specification information, by a connection control system;

receiving a content delivery request containing main content identification information for identifying main content and transmitted by the user equipment, by the application server system;

selecting sub content data stored in a storing device for storing sub content data representing sub content and main content data representing main content, based on selection information containing attribute information representing an attribute of sub content;

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transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, by the application server system; and

transmitting, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output, by the application server system,

wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

16. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the selected sub content specification information transmitted by the application server system, by the user equipment;

transmitting, to the application server system, a main content viewing request containing the main content identification information and an sub content viewing request containing the received

selected sub content specification information, by the user equipment, when connection between the user equipment and the application server system is established by the connection control system; and

receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by main content identification information contained in the received main content viewing request to the user equipment, and receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by selected sub content specification information contained in the received sub content viewing request to the user equipment, by the application server system.

17. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the main content data and the sub content data transmitted by the application server system, and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data, by the user equipment.

18. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the play-list information transmitted by the application server system, by the user equipment; and

transmitting the main content viewing request and the sub content viewing request to the application server system based on the received play-list information, by the user equipment.

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19. (Previously Presented) A service control server comprising:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via a connection control system establishing connection between a media server and the user equipment;

an sub content selection unit for selecting sub content data preliminarily stored in a storing device, based on selection information containing attribute information representing an attribute of sub content; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the

received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

20. (Canceled)

21. (Previously Presented) A user equipment comprising:

a selected sub content specification information reception unit for receiving selected sub content specification information selected based on selection information containing attribute information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application server system, via a connection control system establishing connection between the application server system and the user equipment, wherein the selected sub content specification information reception unit is configured to, when the connection control system executes a process for establishing the connection, receive the play-list information transmitted by the application server system, via the connection control system to the user equipment which has transmitted the content delivery request, wherein the play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output;

a content viewing request transmission unit for transmitting, to the application server system, a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system, wherein the content viewing request transmission unit is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information; and

a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

22. (Canceled)

23. (Canceled)

24. (Previously Presented) The content delivery system according to claim 1, wherein the sub content is advertisement content.

25. (Previously Presented) A content delivery system comprising an application server system and a connection control system,

the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information,

the application server system comprising:

content storage means for storing sub content data representing sub content and main content data representing main content;

delivery request reception means for receiving, a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

sub content selection means for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content; and

selected sub content specification information transmission means for transmitting selected sub content specification information for specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request,

wherein the selected sub content specification information transmission means is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main

content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

26. (Previously Presented) A content delivery system comprising an application server system and a connection control system,

the connection control system comprising a core IMS (Internet Protocol Multimedia Subsystem) part for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a media functions part for transmitting content data representing content to the user equipment with which the connection is established by the core IMS part;

a service control functions part for controlling a service provided by the media functions part; and

a user profile server functions part for storing profile information of a user of the user equipment,

the media functions part comprising content storage means for storing sub content data

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representing sub content and main content data representing main content,

the service control functions part comprising:

delivery request reception means for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the core IMS part; and

sub content selection means for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content and preliminarily stored by the user profile server functions part, the service control functions part or the connection control system; and

selected sub content specification information transmission means for transmitting selected sub content specification information for specifying the selected sub content data, via the core IMS part to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission means is configured to transmit, when the connection control system executes a process for establishing the connection, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a content outputting unit for receiving main content

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data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

27. (Previously Presented) A service control server comprising:

delivery request reception means for receiving a content delivery request containing main content identification information for identifying main content and transmitted by user equipment, via a connection control system establishing connection between a media server and the user equipment;

sub content selection means for selecting sub content data preliminarily stored in a storing device based on selection information containing attribute information representing an attribute of sub content; and

selected sub content specification information transmission means for transmitting selected sub content specification information specifying the selected sub content data, via the connection control system to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission means is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by

the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

28. (Previously Presented) A user equipment comprising:

selected sub content specification information reception means for receiving selected sub content specification information selected based on selection information containing attribute information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application server system, via a connection control system establishing connection between the application server system and the user equipment, wherein the selected sub content specification information reception means is configured to, when the connection control system executes a process for establishing the connection, receive the play-list information transmitted by the application server system, via the connection control system to the user equipment which has transmitted the content delivery request, wherein the play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content

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specification information are output;

content viewing request transmission means for transmitting, to the application server system, a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information, when connection with the application server system is established by the connection control system, wherein the content viewing request transmission means is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information; and

a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

29. (Previously Presented) A server configured to perform operations comprising:

storing a plurality of sub content data and a plurality of main content data, wherein each of the plurality of sub content data is associated with one or more sub content attributes;

receiving a content delivery request from a user device, wherein the content delivery request identifies first main content data of the plurality of main content data;

selecting at least first sub content data and second sub content data from the plurality of sub content data based on the first sub content data and the second sub content data being associated with at least a particular attribute of the sub content attributes;

transmitting a first choice option corresponding to the first sub content data and a second choice option corresponding to the second sub content data to the user device; and

transmitting play-list information to the user device via a connection established by a connection control system, wherein the play-list information identifies the main content, the first sub content data, the second sub content data, and a sequence in which the main content, the first sub content data, the second sub content data are to be output,

wherein the user device comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

30. (Previously Presented) The server according to claim 29, wherein the server is further configured to perform operations comprising:

receiving a sub content viewing request from the user device, wherein the sub content viewing request contains a selected choice corresponding to either the first choice option or the second choice option;

transmitting the first sub content data to the user device as selected sub content data if the selected choice corresponds to the first choice option;

transmitting the second sub content data to the user device as the selected sub content data if the selected choice corresponds to the second choice option; and

transmitting the first main content data identified by the content delivery request to the user

device.

31. (Previously Presented) The server according to claim 30, wherein a user inputs a selection command to the user device to select the first choice option or the second choice option as the selected choice.

32. (Previously Presented) The server according to claim 30, wherein the server is further configured to perform operations comprising:

transmitting the first main content data and the selected sub content data to the user device for viewing on the user device.

33. (Previously Presented) The server according to claim 29, wherein the content delivery request from the user device contains user information about a user of the user device, and

wherein the server is further configured to perform operations comprising selecting the first sub content data and the second sub content data when the particular attribute corresponds to the user information.

34. (Previously Presented) The server according to claim 30, wherein the content delivery request from the user device contains user information about a user of the user device, and

wherein the server is further configured to perform operations comprising selecting the first sub content data and the second sub content data when the particular attribute corresponds to the

user information.

35. (Previously Presented) The server according to claim 29, wherein the server is further configured to perform operations comprising:

associating each of the plurality of main content data with one or more main content attributes;

selecting the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content.

36. (Previously Presented) The server according to claim 30, wherein the server is further configured to perform operations comprising:

associating each of the plurality of main content data with one or more main content attributes;

selecting the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content.

37. (Previously Presented) A content delivery system comprising an application server system and a connection control system,

the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information,

the application server system comprising:

a delivery request reception unit for receiving a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

a sub content selection unit for selecting the sub content data based on the equipment specification information or the main content identification information; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

38. (Previously Presented) A content delivery system comprising an application server system and a connection control system,

the connection control system comprising a core IMS (Internet Protocol Multimedia Subsystem) part for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a media functions part for transmitting content data representing content to the user equipment with which connection is established by the core IMS part;

a service control functions part for controlling a service provided by the media functions part; and

a user profile server functions part for storing profile information of a user of the user equipment, and

the service control functions part comprising:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the core IMS part; and

an sub content selection unit for selecting the sub content data based on the equipment specification information or the main content identification information; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data via the core IMS part to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission unit is configured to transmit, when the

connection control system executes a process for establishing the connection, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

39. (Previously Presented) A content delivery method comprising:

receiving equipment specification information transmitted by user equipment and establishing connection between an application server system and the user equipment based on the received equipment specification information, by a connection control system;

receiving a content delivery request containing main content identification information for identifying main content and transmitted by the user equipment, by the application server system;

selecting sub content data representing sub content based on the equipment specification information or the main content identification information;

transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, by the application server system; and

transmitting, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the

content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output, by the application server system.

40. (Previously Presented) A non-transitory computer program comprising instructions for causing a service control server to realize:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via a connection control system establishing connection between a media server and the user equipment;

an sub content selection unit for selecting content data based on the main content identification information; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, and

the selected sub content specification information transmission unit for transmitting, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list

information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

41. (Previously Presented) A service control server comprising:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via a connection control system establishing connection between a media server and the user equipment;

an sub content selection unit for selecting sub content data based on the main content identification information; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, and

the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is

information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

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REMARKS

Claims 1, 2, 4-6, 8-19, 21 and 24-41 have been examined. Claims 1, 5, 6, 8, 9, 11, 14, 19, 21 and 24-26 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting and claims and claims 1, 2, 4-6, 8-19, 21, 24-41 were rejected under 35 U.S.C. § 103(a).

I. Double Patenting Rejection

Claims 1, 5, 6, 8, 9, 11, 14, 19, 21 and 24-26 were provisionally rejected on the ground of nonstatutory double patenting over claims 1, 3, 7, 11, 19, 20, 23 and 24 of copending U.S. Application No. 13/063122.

Applicants respectfully note that in the previous Office Action, dated September 11, 2014, the Examiner did not assert that dependent claim 3 is unpatentable on the ground of nonstatutory obviousness-type double patenting. Additionally, Applicants respectfully note that in the response to the previous Office Action, filed November 26, 2014, Applicants amended claim 1 to incorporate the limitations of dependent claim 3. Accordingly, Applicants submit the provisional obviousness-type double patenting rejection of claim 1 should have been withdrawn.

Applicants further respectfully submit the rejection of claims 5-6, 8-9, and 24 should have been withdrawn at least based on their dependency on claim 1, the rejection of claims 11, 19, 21, 25, and 26 should have been withdrawn because they recite subject matter similar or analogous to claim 3, and the rejection of claim 14 should have been withdrawn based on its dependency on claim 11.

The present Office Action does not appear to have addressed the above remarks. *See* Office Action at 2-5. Additionally, Applicants note that the double patenting rejection was withdrawn in copending U.S. Application No. 13/063122. *See* Office Action dated March 26, 2015.

Therefore, Applicants respectfully request the Examiner withdrawn the obviousness-type double patenting rejection for at least the reasons above.

II. Rejection under 35 USC § 103(a) over U.S. Patent Application Publication No. 2008/0256216 to AARTS ("AARTS") in view of Japanese Patent Application Publication No. 2008-022298 to Masahito ("Masahito")

Claims 1, 2, 4-6, 8-10, 15-19, 21, 24, 25, 27-37 and 39-41 were rejected under 35 USC § 103(a) over AARTS in view of Masahito. Office Action at 11.

A. Claim 1

Applicants submit that AARTS alone or in combination with Masahito does not disclose all of the features of claim 1. For example, claim 1 states a selected sub content specification information transmission unit is configured to ***transmit*** play-list information containing the selected sub content specification information ***when*** the connection control system executes a process for ***establishing the connection***.

The Examiner asserts that AARTS describes this configuration. Specifically, the Examiner asserts that AARTS describes transmitting the advertisement information and authenticating a user terminal by the authentication service interpreted as the connection control system. Office Action at 2-3. Applicants respectfully disagree.

In AARTS, authenticating and transmitting are described ***separately***, and the authenticating and transmitting are not performed at the same time. By contrast, claim 1 states the selected sub

content specification information transmission unit is configured to ***transmit*** play-list information containing the selected sub content specification information ***when*** the connection control system executes a process for ***establishing the connection***.

Also, Masahito does not cure the deficient teachings of AARTS. Masahito likewise fails to disclose or even suggest that a selected sub content specification information transmission unit is configured to ***transmit*** play-list information containing the selected sub content specification information ***when*** the connection control system executes a process for ***establishing the connection***.

Accordingly, Applicants submit that claim 1 is patentable for at least the reasons presented above.

B. Claims 2, 4-6, 8-10, and 24

Since claims 2, 4-6, 8-10, and 24 depend on claim 1, they are patentable at least based on their dependency.

C. Claims 15, 19, 21, 25, 27-29, 37, and 39-41

Claims 15, 19, 21, 25, 27-29, 37, and 39-41 contain features that are similar or analogous to those discussed in conjunction with claim 1. Therefore, Applicants submit that these claims are patentable for at least similar reasons.

D. Claims 16-18 and 30-36

Since claims 16-18 and 30-36 depend on claims 15 and 29, they are patentable at least based on their dependency.

III. Rejection under 35 USC § 103(a) over AARTS in view of Masahito and further in view of U.S. Patent Application Publication No. 2007/0223523 to Montpetit et al. ("Montpetit")

Claims 11-14, 26, and 38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over AARTS in view of Masahito and further in view of Montpetit. Office Action at 44.

A. Claims 11, 26, and 38

Claims 11, 26, and 38 contain features that are similar or analogous to those discussed in conjunction with claim 1, and since Montpetit does not cure the deficient teachings of AARTS and Masahito with respect to claim 1, Applicants submit that claims 11, 26, and 38 are patentable for at least similar reasons.

B. Claims 12-14

Since claims 12-14 depend upon claim 11, and since the Montpetit does not cure the deficient teachings of AARTS and Masahito with respect to claim 11, claims 12-14 are patentable at least based on their dependency.

IV. Conclusion

Applicants believe the pending application is in condition for allowance. Applicants believe no other fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-0219, under Order No. 2207946.00141US1, from which the undersigned is authorized to draw.

Respectfully submitted,

Dated: August 10, 2015

/Michael Smith/

_____
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PTO/SB/06 (09-11)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/129,756	Filing Date 05/17/2011	☐ To be Mailed

ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) 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), (i), 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 $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ 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

AMENDMENT **08/10/2015**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 36	Minus	** 41	= 0	X $80 =	0
Independent (37 CFR 1.16(h))	* 15	Minus	***15	= 0	X $420 =	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

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
☐ 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.
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/WANDA MEREDITH/

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Courtesy Reminder for
Application Serial No: 13/129,756

Attorney Docket No: J-11-0248
Customer Number: 71799
Date of Electronic Notification: 04/08/2015

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(Not for submission under 37 CFR 1.99)

Application Number	13129756
Filing Date	2011-05-17
First Named Inventor	Kunihiro Taniguchi
Art Unit	2413
Examiner Name	PASCUAL PEGUERO, NATALI
Attorney Docket Number	J-11-0248

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	1	2007-528680	JP	A	2007-10-11	SCHILLER,Jay,B. et al	English Abstract from WO2005086865 Cited in JPOA.	☒
	2	2005-012655	JP	A	2005-01-13	AZUMA TSUTOMU et al	English Abstract Cited in JPOA.	☒

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	Application Number	13129756
	Filing Date	2011-05-17
	First Named Inventor	Kunihiro Taniguchi
	Art Unit	2413
	Examiner Name	PASCUAL PEGUERO, NATALI
	Attorney Docket Number	J-11-0248

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	Japanese Office Action for JP Application No. 2014-087402 mailed on March 31, 2015.	☐

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	13129756
Filing Date	2011-05-17
First Named Inventor	Kunihiro Taniguchi
Art Unit	2413
Examiner Name	PASCUAL PEGUERO, NATALI
Attorney Docket Number	J-11-0248

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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.

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Name/Print	Carl J Pellegrini	Registration Number	40766

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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.

Docket No. J-11-0248

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Kunihiro Taniguchi
Application No.: 13/129,756 Art Unit: 2413

Filed: 05-17-2011 Examiner: PASCUAL PEGUERO, NATALI

Confirmation Number: 1971

For: CONTENT DELIVERY SYSTEM

INFORMATION DISCLOSURE STATEMENT WITH CERTIFICATION UNDER 37 C.F.R. § 1.704(d)

I hereby certify that each item of information contained in the co-filed information disclosure statement was first cited in a communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 CFR 1.56(c) more than thirty (30) days prior to the filing of the co-filed information disclosure statement.

Respectfully submitted,

/ Carl J. Pellegrini /

Carl J Pellegrini, 40766

April 16, 2015

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Peloton - Ex. 1002, Page 513
IPR2023-01241 (Peloton v. NEC)

Electronic Patent Application Fee Transmittal

Application Number:	13129756
Filing Date:	17-May-2011
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Filer:	Carl Joseph Pellegrini/Andrew Annis
Attorney Docket Number:	J-11-0248

Filed as Large Entity

Filing Fees for U.S. National Stage under 35 USC 371

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($)
Miscellaneous:				
Submission- Information Disclosure Stmt	1806	1	180	180
		Total in USD ($)		**180**

Electronic Acknowledgement Receipt

EFS ID:	22082816
Application Number:	13129756
International Application Number:	
Confirmation Number:	1971
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Customer Number:	71799
Filer:	Carl Joseph Pellegrini/Andrew Annis
Filer Authorized By:	Carl Joseph Pellegrini
Attorney Docket Number:	J-11-0248
Receipt Date:	16-APR-2015
Filing Date:	17-MAY-2011
Time Stamp:	14:51:06
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	Electronic Funds Transfer
Payment was successfully received in RAM	$180
RAM confirmation Number	1116
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	Information Disclosure Statement (IDS) Form (SB08)	IDS_SB_08.pdf	612494 83ca53bda135c5bd0e51306d1779aa6f439bcb33	no	4
Warnings:					
Information:					
2	Transmittal Letter	IDS_Statement.pdf	15857 6149b2b964c314c601207db53c78995d5b8e3e7d	no	1
Warnings:					
Information:					
3	Non Patent Literature	JP_OA.pdf	79082 cd296195b59c9b93735f0054c342d06ea5602598	no	3
Warnings:					
Information:					
4	Foreign Reference	JP_2005-012655.pdf	980121 0dc1a806424d8961655a271c4eb6a50b35fad157	no	37
Warnings:					
Information:					
5	Foreign Reference	JP_2007-528680.pdf	1005562 cc08ab31da52a4f288d15fa294b2c2ac653c0c6e	no	33
Warnings:					
Information:					
6	Fee Worksheet (SB06)	fee-info.pdf	30777 9d28dd4e6f7a2ac4e2aa92fed5e9c3ead716d9b3	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	2723893		

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.

UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/129,756	05/17/2011	Kunihiro Taniguchi	J-11-0248	1971

71799 7590 04/08/2015

Mr. Ryoichi Harada
2100 Pennsylvania Ave., NW
SUITE 560
Washington, DC 20037-3213

EXAMINER	
PASCUAL PEGUERO, NATALI	

ART UNIT	PAPER NUMBER
2413	

NOTIFICATION DATE	DELIVERY MODE
04/08/2015	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):

ryoichi.harada@necam.com
Satoko.Kajima@necam.com
necipca@necam.com

Office Action Summary	Application No. 13/129,756	Applicant(s) TANIGUCHI ET AL.	
	Examiner NATALI N. PASCUAL PEGUERO	Art Unit 2413	AIA (First Inventor to File) 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 *26 November 2014*.

☐ 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) *1,2,4-6,8-19,21 and 24-41* 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) *1,2,4-6,8-19,21 and 24-41* 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 _____ 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: _____.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

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

Response to Arguments

2. Applicant's arguments filed 11/26/2014 have been fully considered but they are not persuasive.

With respect to claim 1:

The applicant presented arguments on pages 32 – 37 that the references fail to show certain features of applicant's invention, for example, "selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output".

The examiner respectfully disagrees with the arguments presented by the applicant. AARTS teaches selected sub content specification information transmission unit is configured to transmit **(Fig. 3, step 34 shows that the advertisement service**

transmits the advertisement information to the user device; Page 2, Paragraph 0023), when the connection control system executes a process for establishing the connection **(the authentication service interpreted as "the connection control system" is configured to authenticate the user devices verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021)**, via the connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**. Masahito teaches play-list information **(the playlist; Page 37, Paragraph 0136)** which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(playlist generating unit 13b extracts the CM (Commercial Message) data included in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135** ***Note: the examiner interpreted the CM data as the sub content information, and the content ID as the main content identification information*****)**, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(extracts the CM data included in the contents from the advertisement frame memory unit 16 and delivers the play list**

generation unit 13b, (M407); Page 35, Paragraph 0131 … the playlist to perform processing such as, play, and transmits it to the viewer's terminal; Page 37, Paragraph 0136).

It has been shown that the teachings in the references clearly address the above limitation of claim 1, and therefore the rejection is maintained.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies **(i.e., the process for establishing a connection and the process for transmitting the play-list information can thus advantageously be executed concurrently as described on page 33 of applicant's remarks)** are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

With respect to claims 2, 4-6, 8-10, and 24:

The applicant's arguments have been fully considered but they are not persuasive. The teachings in the references clearly address the limitations in claim 1, and therefore the rejections with respect to claims 2, 4-6, 8-10, and 24 are maintained.

With respect to claims 15, 19, 21, 25, 27-29, 37, and 39-41:

The applicant's arguments have been fully considered but they are not persuasive. The teachings in the references clearly address the limitations in claim 1, and therefore the rejections with respect to claims 15, 19, 21, 25, 27-29, 37, and 39-41 are maintained.

With respect to claims 16-18 and 30-36:

The applicant's arguments have been fully considered but they are not persuasive. The teachings in the references clearly address the limitations in claims 15 and 29, and therefore the rejections with respect to claims 16-18 and 30-36 are maintained.

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 claims at issue 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); and *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 a nonstatutory double patenting ground provided the reference application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of

activities undertaken within the scope of a joint research agreement. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO internet Web site contains terminal disclaimer forms which may be used. Please visit http://www.uspto.gov/forms/. The filing date of the application will determine what form 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 http://www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp.

3. Claims 1, 5, 6, 8, 9, 11, 14, 19, 21 and 24 - 26 are provisionally rejected on the ground of nonstatutory double patenting over claims 1, 3, 7, 11 and 19, 20, 23 and 24 of copending Application No. 13/063,122. This is a provisional double patenting rejection because the patentably indistinct claims have not in fact been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

Although the claims at issue are not identical, they are not patentably distinct from each other because *claims **1, 5, 6, 8, 9, 11, 14, 19, 21 and 24 - 26** of the instant application merely broaden the scope of the claims **1, 3, 7, 11 and 19, 20, 23 and 24** of*

U.S. Application No. 13/063,122*. It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before (See MPEP §804.II.B.1 and §2144.04 IIA).*

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See In re Schneller, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Interpretation - 35 USC § 112

The following is a quotation of 35 U.S.C. 112(f):

> (f) Element in Claim for a Combination. – An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

The following is a quotation of pre-AIA 35 U.S.C. 112, sixth paragraph:

> An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

Use of the word “means” (or “step for”) in a claim with functional language creates a rebuttable presumption that the claim element is to be treated in accordance with 35 U.S.C. § 112(f) (pre-AIA 35 U.S.C. 112, sixth paragraph). The presumption that § 112(f) (pre-AIA § 112, sixth paragraph) is invoked is rebutted when the function is recited with sufficient structure, material, or acts within the claim itself to entirely perform the recited function.

Absence of the word “means” (or “step for”) in a claim creates a rebuttable presumption that the claim element is not to be treated in accordance with 35 U.S.C. §

112(f) (pre-AIA 35 U.S.C. 112, sixth paragraph). The presumption that § 112(f) (pre-AIA § 112, sixth paragraph) is not invoked is rebutted when the claim element recites function but fails to recite sufficiently definite structure, material or acts to perform that function.

Claim elements in this application that use the word “means” (or “step for”) are presumed to invoke § 112(f) except as otherwise indicated in an Office action. Similarly, claim elements that do not use the word “means” (or “step for”) are presumed not to invoke § 112(f) except as otherwise indicated in an Office action.

The limitations of claims **25 - 28** that recite(s) “content storage means for storing sub content data representing sub content and main content data representing main content; delivery request reception means for receiving, a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content; sub content selection means for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content; and selected sub content specification information transmission means for transmitting selected sub content specification information for specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission means is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is

information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output; the media functions part comprising content storage means for storing sub content data representing sub content and main content data representing main content, the service control functions part comprising: delivery request reception means for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the core IMS part; and sub content selection means for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content and preliminarily stored by the user profile server functions part, the service control functions part or the connection control system ...." without reciting sufficient structure to achieve the function. Furthermore, the non-structural term is not preceded by a structural modifier.

Since this claim limitation invokes 35 U.S.C. 112(f) or 35 U.S.C. 112 (pre-AIA), sixth paragraph, claims **25 - 28** are interpreted to cover the corresponding structure described in the specification that achieves the claimed functions, and equivalents thereof.

A review of the specification shows that the following appears to be the corresponding structure described in the specification for the 35 U.S.C. 112(f) or

35 U.S.C. 112 (pre-AIA), sixth paragraph limitation: Page 15, Paragraphs 0250 - 0253 of the specification discloses that "The content delivery system 1 further includes a content storage (content storage means) RC, delivery request receiver (delivery request reception means) 101, an advertisement content selector (advertisement content selection means) 102, and a selected advertisement content specification information transmitter (selected advertisement content specification information transmission means) 103. The content storage RC stores advertisement content data representing advertisement content and main content data representing main content. The delivery request receiver 101 receives, via the connection control system 3, a content delivery request containing main content identification information for identifying main content and transmitted by the user equipment 2. The advertisement content selector 102 selects the advertisement content data stored in the content storage RC based on advertisement selection information containing advertisement attribute information representing an attribute of the advertisement content. The selected advertisement content specification information transmitter 103 transmits selected advertisement content specification information for specifying advertisement content data selected by the advertisement content selector 102 via the connection control system 3 to the user equipment 2 which has transmitted the content delivery request". (See also Paragraphs 0049, 0254 and 0026).

If applicant wishes to provide further explanation or dispute the examiner's interpretation of the corresponding structure, applicant must identify the corresponding

structure with reference to the specification by page and line number, and to the drawing, if any, by reference characters in response to this Office action.

If applicant does **not** wish to have the claim limitation treated under 35 U.S.C. 112(f) or 35 U.S.C. 112 (pre-AIA), sixth paragraph, applicant may amend the claim so that it will clearly not invoke 35 U.S.C. 112(f) or 35 U.S.C. 112 (pre-AIA), sixth paragraph, or present a sufficient showing that the claim recites sufficient structure, material, or acts for performing the claimed function to preclude application of 35 U.S.C. 112(f) or 35 U.S.C. 112 (pre-AIA), sixth paragraph.

For more information, see MPEP § 2173 et seq. and *Supplementary Examination Guidelines for Determining Compliance with 35 U.S.C. § 112 and for Treatment of Related Issues in Patent Applications*, 76 FR 7162, 7167 (Feb. 9, 2011).

Claim Rejections - 35 USC § 103

4. 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 of this title, 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 negatived by the manner in which the invention was made.

5. Claim 1, 2, 4 - 6, 8 - 10, 15 - 19, 21, 24, 25, 27 - 37 and 39 – 41 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over AARTS (Pub # US 2008/0256216 A1) in view of Masahito et al. (JP 2008022298 hereinafter Masahito, disclosed by the Applicant's IDS).

Regarding claim 1, AARTS teaches a content delivery system **(a method of supplying advertising content; Page 1, Paragraph 0001)** comprising an application server system **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** and a connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)**, the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information **(the authentication service interpreted as "the connection control system" is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021)**, the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)** comprising: a content storage unit for storing sub content data representing sub content and main content data representing main content **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), and may also track advertisement data sent to a particular user or device; Page 2, Paragraph 0021)**; a delivery request reception unit for receiving **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)** a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content **(the advertisement device is operable to receive a data request from the user device, said data request is**

transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022); a sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** via the connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, wherein the selected sub content specification information transmission unit is configured to transmit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, when the connection control system executes a

process for establishing the connection **(the authentication service interpreted as "the connection control system" is configured to authenticate the user devices verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021)**, via the connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose play-list information which is information containing the main content identification information contained in the

content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Masahito teaches play-list information **(the playlist; Page 37, Paragraph 0136)** which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(Playlist generating unit 13b extracts the CM (Commercial Message) data included in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135** ***Note: the examiner interpreted the CM data as the sub content information, and the content ID as the main content identification information*****)**, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(extracts the CM data included in the contents from the advertisement frame memory unit 16 and delivers the play list generation unit 13b, (M407); Page 35, Paragraph 0131 … the playlist to perform processing such as, play, and transmits it to the viewer's terminal; Page 37, Paragraph 0136)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Masahito with AARTS to

deliver user-friendly advertisements in accordance with the video content **(Masahito: Page 1, Paragraph 0001)**.

Regarding claim 2, AARTS discloses wherein: the user equipment comprises **(the user device interpreted as "user equipment"; Page 2, Paragraph 0021)**: a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the application server system **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and a content viewing request transmission unit for transmitting **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**, and the application server system comprises a content delivering unit for receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by the main content

identification information contained in the received main content viewing request to the user equipment **(the advertisement service receives a data request in the store (Fig. 1, element 13a) from the user device in accordance to the user's desired content transmitted by the authentication service, and at step 34 transmits the advertisement information to the user device 10; Page 2, Paragraphs 0021 - 0023)**, and for receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by the selected sub content specification information contained in the received sub content viewing request to the user equipment **(Fig. 3, step 30 shows that the advertisement service receives the data request from the user device, and at step 34 transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding claim 4, AARTS teaches wherein: the content viewing request transmission unit is configured to transmit **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** the main content viewing request and the sub content viewing request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)** to the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**.

However, AARTS does not specifically disclose the selected sub content specification information reception unit is configured to receive the play-list information

transmitted by the application server system; based on the received play-list information.

In an analogous art, Masahito teaches the selected sub content specification information reception unit is configured to receive the play-list information transmitted by the application server system **(determining the playlist to perform processing such as replacing the CM, to play, and transmits it to the viewer terminal 5 (M409); Page 36, Paragraph 0134)**; based on the received play-list information **(Playlist generating unit 13b extracts the CM (Commercial Message) data included in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135 … extracts the CM data included in the contents from the advertisement frame memory unit 16 and delivers the play list generation unit 13b, (M407); Page 35, Paragraph 0131 … The video distribution server 13, extracts the advertisement frame associated to content ID with a distribution request from the advertisement frame memory unit 16, and checks whether the advertisement frame according to a user attribute is set up in the placement decision service in (S103); Page 36, Paragraph 0132)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Masahito with AARTS to deliver user-friendly advertisements in accordance with the video content **(Masahito: Page 1, Paragraph 0001)**.

Regarding claim 5, AARTS discloses wherein: the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of sub content represented by the sub content data **(the content service (Fig. 1, element 11) interpreted as "the content storage unit" is configured to store the content information comprising content data to be used in providing an output to the user, and metadata interpreted as to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; the selection information contains user basic information that is information for specifying the attribute information and is information associated with user identification information for identifying a user of the user equipment **(in the system of Fig. 5, the user device receives content data and metadata, but in this example the metadata comprises a pointer to authentications service, and the fig. 4, step 41 shows that the authentication service identifies the user device from the information transmitted; Page 2, Paragraph 0024 and 0029)**; and the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the user basic information **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user**

information and transmit it to the user device ; Page 1, Paragraph 0013) associated with the user identification information for identifying the user **(at step 33, the advertisement service generates advertisement information in accordance with the received authentication information used for identifying the user device; Page 2, Paragraph 0023)** of the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**.

Regarding claim 6, AARTS discloses wherein: the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of the sub content represented by the sub content data **(the content service (Fig. 1, element 11) interpreted as "the content storage unit" is configured to store the content information comprising content data to be used in providing an output to the user, and metadata to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; the selection information contains content basic information that is information for specifying the attribute information and is information associated with the main content identification information for identifying the main content **(the content information comprising content data to be used in providing an output to the user, and metadata to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; and the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the content basic information associated with the main content identification information **(the authentication service**

transmits general information thus allowing an advertisement to be personalized to the user, such as age, gender, geographic information or any other information as appropriate. At step 33, the advertisement service generates advertisement information in accordance with the received authentication information; Page 2, Paragraph 0023) contained in the received content delivery request **(Fig. 3, step 30 shows that the advertisement service receives the data request from the user device; Page 2, Paragraph 0023)**.

Regarding claim 8, AARTS discloses wherein the connection control system is configured to establish the connection by exchanging a predetermined connection establishment message with each of the user equipment and the application server system **(the authentication service interpreted as "the connection control system" is configured to authenticate the user devices verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021)**; and the selected sub content specification information transmission unit is configured to transmit the selected sub content specification information to the user equipment **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** via the connection control system **(the authentication service interpreted as "the connection control system"; Page 2, Paragraph 0021)** by incorporating the selected sub content specification information in the connection establishment message **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received**

authentication information used for establishing connection with the user device; Page 2, Paragraph 0023).

Regarding claim 9, AARTS discloses wherein: the application server system comprises a service control server and a media server **(an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and the service control server comprises the delivery request reception unit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, the sub content selection unit **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**, and the selected sub content specification information transmission unit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding claim 10, AARTS discloses wherein: The application server system comprises a service control server and a media server **(an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; the service control server comprises the delivery request reception unit **(the advertisement device is operable**

to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021); the media server comprises the content storage unit **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), the sub content selection unit (Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**, and the selected sub content specification information transmission unit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**; the service control server further comprises an selection information transmission unit for transmitting the selection information to the media server **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information; Page 2, Paragraph 0023)** via the connection control system **(the authentication service interpreted as "the connection control system"; Page 2, Paragraph 0021)**; the media server further comprises an selection information reception unit for receiving the selection information transmitted by the service control server **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and the sub content selection unit is configured to select the sub content data based on the received selection information **(the advertisement service generates advertisement information interpreted as "the**

sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023).

Regarding claim 15, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding claim 16, the claim is interpreted and rejected for the same reason as set forth in claim 2.

Regarding claim 17, AARTS discloses receiving the main content data and the sub content data transmitted by the application server system **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**, and outputting **(Fig. 2, step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data, by the user equipment **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

Regarding claim 18, the claim is interpreted and rejected for the same reason as set forth in claim 4.

Regarding claim 19, AARTS teaches a server control server **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** comprising: a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content **(the advertisement device is operable to receive a data request (Fig. 1, element 14) from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)** and transmitted by a user equipment **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** via a connection control system establishing connection between a media server and the user equipment **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; an sub content selection unit for selecting sub content data preliminarily stored in a storing device **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**, based on selection information containing attribute information representing an attribute of sub content **(the content information comprising content data to be used in providing an output to the user, and metadata to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the

selected content data via the connection control system to the user equipment which has transmitted the content delivery request **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, wherein the selected sub content specification information transmission unit is configured to transmit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, when the connection control system executes a process for establishing the connection **(the authentication service interpreted as "the connection control system" is configured to authenticate the user devices verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021)**, via the connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2,**

Paragraph 0022), viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Masahito teaches play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(playlist generating unit 13b extracts the CM (Commercial Message) data included in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135** ***Note: the examiner interpreted the CM data as the sub content information, and the content ID as the main content identification information*****)**, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(extracts the CM data**

included in the contents from the advertisement frame memory unit 16 and delivers the play list generation unit 13b, (M407); Page 35, Paragraph 0131 … the playlist to perform processing such as, play, and transmits it to the viewer's terminal; Page 37, Paragraph 0136).

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Masahito with AARTS to deliver user-friendly advertisements in accordance with the video content **(Masahito: Page 1, Paragraph 0001)**.

Regarding claim 21, AARTS teaches a user equipment comprising **(the user device interpreted as "user equipment"; Page 2, Paragraph 0021)**: a selected sub content specification information reception unit for receiving selected sub content specification information **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)** selected based on selection information containing attribute information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application server system **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with**

the user information and transmit it to the user device ; Page 1, Paragraph 0013), via a connection control system establishing connection between the application server system and the user equipment **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; wherein the selected sub content specification information reception unit **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)** is configured to, when the connection control system executes a process for establishing the connection **(the authentication service interpreted as "the connection control system" is configured to authenticate the user devices verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021)**, via the connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**; a content viewing request transmission unit for transmitting **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**, a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing

the received selected sub content specification information when connection with the application server system is established by the connection control system **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**, wherein the content viewing request transmission unit **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the media functions part **(the advertisement service interpreted as "the media functions part"; Page 2, Paragraph 0021)** is configured to transmit the main content viewing request and the sub content viewing request to the application server system **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**, a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content

represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose receive the play-list information transmitted by an application server system, wherein the play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output; based on the received play-list information.

In an analogous art, Masahito teaches receive the play-list information transmitted by an application server system **(determining the playlist to perform processing such as replacing the CM, to play, and transmits it to the viewer terminal 5 (M409); Page 36, Paragraph 0134)**, wherein the play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(extracts the CM data included in the contents from the advertisement frame memory unit 16 and**

delivers the play list generation unit 13b, (M407); Page 35, Paragraph 0131 … the playlist to perform processing such as, play, and transmits it to the viewer's terminal; Page 37, Paragraph 0136); based on the received play-list information **(Playlist generating unit 13b extracts the CM (Commercial Message) data included in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Masahito with AARTS to deliver user-friendly advertisements in accordance with the video content **(Masahito: Page 1, Paragraph 0001)**.

Regarding claim 24, AARTS discloses wherein the sub content is advertisement content **(advertisement information; Page 1, Paragraph 0005)**.

Regarding claim 25, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding claim 27, the claim is interpreted and rejected for the same reason as set forth in claim 19.

Regarding claim 28, the claim is interpreted and rejected for the same reason as set forth in claim 21.

Regarding claim 29, AARTS teaches a server configured to perform operations comprising: storing a plurality of sub content data and a plurality of main content data **(the advertisement service stores advertisement information in store (Fig. 1,**

element 13a), and may also track advertisement data sent to a particular user or device; Page 2, Paragraph 0021), wherein each of the plurality of sub content data is associated with one or more sub content attributes **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)** ; receiving a content delivery request from a user device **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)**, wherein the content delivery request identifies first main content data of the plurality of main content data **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**; selecting at least first sub content data and second sub content data from the plurality of sub content data based on the first sub content data and the second sub content data being associated with at least a particular attribute of the sub content attributes **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic**

information or any other information as appropriate; Page 2, Paragraph 0023); transmitting a first choice option corresponding to the first sub content data and a second choice option corresponding to the second sub content data to the user device **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose transmitting play-list information to the user device via a connection established by a connection control system, wherein the play-list information identifies the main content, the first sub content data, the second sub content data, and a sequence in which the main content, the first sub content data, the second sub content data are to be output.

In an analogous art, Masahito teaches transmitting play-list information to the user device via a connection established by a connection control system, wherein the play-list information identifies the main content, the first sub content data, the second sub content data, and a sequence in which the main content, the first sub content data, the second sub content data are to be output **(Playlist generating unit 13b extracts the CM (Commercial Message) data included in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135 … extracts the CM data included in the contents from the advertisement frame memory unit 16 and delivers the play list generation unit 13b, (M407); Page 35, Paragraph 0131 … The video distribution server 13, extracts the advertisement frame associated to content ID with a distribution request from the advertisement frame memory unit 16, and checks whether the advertisement frame according to a user attribute is set up in the placement decision service in (S103); Page 36, Paragraph 0132)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Masahito with AARTS to deliver user-friendly advertisements in accordance with the video content **(Masahito: Page 1, Paragraph 0001)**.

Regarding claim 30, AARTS discloses wherein the server is further configured to perform operations comprising: receiving a sub content viewing request from the user device, wherein the sub content viewing request contains a selected choice

corresponding to either the first choice option or the second choice option **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**; transmitting the first sub content data to the user device as selected sub content data if the selected choice corresponds to the first choice option; transmitting the second sub content data to the user device as the selected sub content data if the selected choice corresponds to the second choice option **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**; and transmitting the first main content data identified by the content delivery request to the user device **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding claim 31, AARTS discloses wherein a user inputs a selection command to the user device to select the first choice option or the second choice option as the selected choice **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**.

Regarding claim 32, AARTS discloses wherein the server is further configured to perform operations comprising: transmitting the first main content data and the selected sub content data to the user device for viewing on the user device **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding claim 33, AARTS discloses wherein the content delivery request from the user device contains user information about a user of the user device **(the user information store (Fig. 1, element 16a) comprise demographic information corresponding to the user; Page 1, Paragraph 0010)**, and wherein the server is further configured to perform operations comprising selecting the first sub content data and the second sub content data when the particular attribute corresponds to the user information **(an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**.

Regarding claim 34, the claim is interpreted and rejected for the same reason as set forth in claim 33.

Regarding claim 35, AARTS discloses wherein the server is further configured to perform operations comprising: associating each of the plurality of main content data with one or more main content attributes **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's**

recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023); selecting the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**.

Regarding claim 36, the claim is interpreted and rejected for the same reason as set forth in claim 35.

Regarding claim 37, AARTS teaches a content delivery system **(a method of supplying advertising content; Page 1, Paragraph 0001)** comprising an application server system **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** and a connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)**, the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information **(the authentication service**

interpreted as "the connection control system" is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021), the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)** comprising: a delivery request reception unit for receiving **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)** a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**; a sub content selection unit for selecting the sub content data based on the equipment specification information or the main content identification information **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and a selected sub content specification information transmission unit for transmitting selected sub content

specification information for specifying the selected sub content data **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** via the connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, wherein the selected sub content specification information transmission unit is configured to transmit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, when the connection control system executes a process for establishing the connection **(the authentication service interpreted as "the connection control system" is configured to authenticate the user devices verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021)**, via the connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**.

However, AARTS does not specifically disclose play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content

identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Masahito teaches play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(playlist generating unit 13b extracts the CM (Commercial Message) data included in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135** ***Note: the examiner interpreted the CM data as the sub content information, and the content ID as the main content identification information*****)**, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(extracts the CM data included in the contents from the advertisement frame memory unit 16 and delivers the play list generation unit 13b, (M407); Page 35, Paragraph 0131 … the playlist to perform processing such as, play, and transmits it to the viewer's terminal; Page 37, Paragraph 0136).**

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Masahito with AARTS to deliver user-friendly advertisements in accordance with the video content **(Masahito: Page 1, Paragraph 0001)**.

Regarding claim 39, the claim is interpreted and rejected for the same reason as set forth in claim 37.

Regarding claim 40, AARTS teaches a non-transitory computer program comprising instructions for causing a service control server to realize: a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content **(the advertisement device is operable to receive a data request (Fig. 1, element 14) from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)** and transmitted by a user equipment **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** via a connection control system establishing connection between a media server and the user equipment **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; an sub content selection unit for selecting content data based on the main content identification information **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request **(Fig. 3, step**

34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023), and the selected sub content specification information transmission unit for transmitting **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, when the connection control system executes a process for establishing the connection **(the authentication service interpreted as "the connection control system" is configured to authenticate the user devices verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021)**, via the connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**.

However, AARTS does not specifically disclose play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Masahito teaches play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(playlist generating unit**

13b extracts the CM (Commercial Message) data included in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135 ***Note: the examiner interpreted the CM data as the sub content information, and the content ID as the main content identification information*****)**, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(extracts the CM data included in the contents from the advertisement frame memory unit 16 and delivers the play list generation unit 13b, (M407); Page 35, Paragraph 0131 … the playlist to perform processing such as, play, and transmits it to the viewer's terminal; Page 37, Paragraph 0136)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Masahito with AARTS to deliver user-friendly advertisements in accordance with the video content **(Masahito: Page 1, Paragraph 0001)**.

Regarding claim 41, the claim is interpreted and rejected for the same reason as set forth in claim 40.

6. Claims 11 - 14, 26 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over AARTS in view of Masahito, and further in view of Montpetit et al. (Pub # US 2007/0223523 A1 hereinafter Montpetit).

Regarding claim 11, AARTS teaches a content delivery system **(a method of supplying advertising content; Page 1, Paragraph 0001)** comprising an application server system **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** and a connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)**, the connection control system for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information **(the authentication service interpreted as "the connection control system" is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021)**, the application server system comprising **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**: a media functions part for transmitting content data representing content to the user equipment **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** with which the connection is established **((Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; a service control functions part for controlling a service provided by the media functions part **(an advertisement server is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1,**

Paragraph 0013); and a user profile server functions part for storing profile information of a user of the user equipment **(the user information store (Fig. 1, element 16a) comprise demographic information corresponding to the user; Page 1, Paragraph 0010)**, the media functions part comprising a content storage unit for storing sub content data representing sub content and main content data representing main content **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), and may also track advertisement data sent to a particular user or device; Page 2, Paragraph 0021)**, the service control functions part comprising: a delivery request reception unit for receiving **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)** a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment content **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**; and an sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)** and preliminarily stored by the user profile server functions part **(Fig. 2, step 21 shows that the user device**

receives data including content information from the content service; Page 2, Paragraph 0022), the service control functions part or the connection control system **(the authentication service interpreted as "the connection control system"; Page 2, Paragraph 0021)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data to the user equipment which has transmitted the content delivery request **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, wherein the selected sub content specification information transmission unit is configured to transmit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, when the connection control system executes a process for establishing the connection **(the authentication service interpreted as "the connection control system" is configured to authenticate the user devices verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021)**, to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph**

0022), based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose a core IMS (Internet Protocol Multimedia Subsystem) part, via the core IMS part; play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Masahito teaches play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(playlist generating unit 13b extracts the CM (Commercial Message) data included in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135** ***Note: the examiner interpreted the CM data as the sub content information,***

and the content ID as the main content identification information), and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(extracts the CM data included in the contents from the advertisement frame memory unit 16 and delivers the play list generation unit 13b, (M407); Page 35, Paragraph 0131 … the playlist to perform processing such as, play, and transmits it to the viewer's terminal; Page 37, Paragraph 0136)**.

It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Masahito with AARTS to deliver user-friendly advertisements in accordance with the video content **(Masahito: Page 1, Paragraph 0001)**.

However, the combination of AARTS and Masahito does not specifically disclose comprising a core IMS (Internet Protocol Multimedia Subsystem) part, via the core IMS part.

In an analogous art, Montpetit teaches comprising a core IMS (Internet Protocol Multimedia Subsystem) part **(the core network comprises an IP Multimedia Core Network Subsystem (IMS); Page 2, Paragraph 0018)**, via the core IMS part **(the core network comprises an IMS; Page 2, Paragraph 0018)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Montpetit to the modified

system of AARTS and Masahito to provide an effective network services and application customization **(Montpetit: Page 1, Paragraph 0013)**.

Regarding claim 12, the combination of AARTS and Masahito, specifically AARTS teaches wherein: the user equipment comprises **(the user device interpreted as "user equipment"; Page 2, Paragraph 0021)**: a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the service control functions part **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and a content viewing request transmission unit for transmitting **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the media functions part **(the advertisement service interpreted as "the media functions part"; Page 2, Paragraph 0021)**, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**, when connection with the media functions part is established by **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**, and the media functions part comprises a content delivering unit for

receiving the main content viewing request transmitted by the user equipment and transmitting to the user equipment main content data identified by the main content identification information contained in the received main content viewing request **(the advertisement service receives a data request in the store (Fig. 1, element 13a) from the user device in accordance to the user's desired content transmitted by the authentication service, and at step 34 transmits the advertisement information to the user device 10; Page 2, Paragraphs 0021 - 0023)**, and for receiving the sub content viewing request transmitted by the user equipment and transmitting to the user equipment sub content data specified by the selected sub content specification information contained in the received sub content viewing request **(Fig. 3, step 30 shows that the advertisement service receives the data request from the user device, and at step 34 transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

However, the combination of AARTS and Masahito does not specifically disclose the core IMS part.

In an analogous art, Montpetit teaches the core IMS part **(the core network comprises an IP Multimedia Core Network Subsystem (IMS); Page 2, Paragraph 0018)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Montpetit to the modified system of AARTS and Masahito to provide an effective network services and application customization **(Montpetit: Page 1, Paragraph 0013)**.

Regarding claim 13, AARTS discloses wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the media functions part **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, and outputting **(at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

Regarding claim 14, AARTS teaches wherein the selected sub content specification information reception unit is configured to receive **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and the content viewing request transmission unit is configured to transmit **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** the main content viewing request and the sub content viewing request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing**

content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022) to the media functions part **(the advertisement service ; Page 2, Paragraph 0021)**.

However, AARTS does not specifically disclose the play-list information transmitted by the service control functions part; based on the received play-list information.

In an analogous art, Masahito teaches the play-list information transmitted by the service control functions part **(determining the playlist to perform processing such as replacing the CM, to play, and transmits it to the viewer terminal 5 (M409); Page 36, Paragraph 0134);** based on the received play-list information **(playlist generating unit 13b extracts the CM (Commercial Message) data included in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135 … extracts the CM data included in the contents from the advertisement frame memory unit 16 and delivers the play list generation unit 13b, (M407); Page 35, Paragraph 0131 … The video distribution server 13, extracts the advertisement frame associated to content ID with a distribution request from the advertisement frame memory unit 16, and checks whether the advertisement frame according to a user attribute is set up in the placement decision service in (S103); Page 36, Paragraph 0132)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Masahito with AARTS to

deliver user-friendly advertisements in accordance with the video content **(Masahito: Page 1, Paragraph 0001)**.

Regarding claim 26, the claim is interpreted and rejected for the same reason as set forth in claim 11.

Regarding claim 38, AARTS teaches a content delivery system **(a method of supplying advertising content; Page 1, Paragraph 0001)** comprising an application server system **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** and a connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)**, the connection control system for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information **(the authentication service interpreted as "the connection control system" is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021)**, the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)** comprising: a media functions part for transmitting content data representing content to the user equipment **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** with which connection is established **((Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish**

connection with the advertisement service; Page 2, Paragraph 0023); a service control functions part for controlling a service provided by the media functions part **(an advertisement server is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and a user profile server functions part for storing profile information of a user of the user equipment **(the user information store (Fig. 1, element 16a) comprise demographic information corresponding to the user; Page 1, Paragraph 0010)**, and the service control functions part comprising: a delivery request reception unit for receiving **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)** a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**, and an sub content selection unit for selecting the sub content data based on the equipment specification information or the main content identification information **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the

selected sub content data to the user equipment which has transmitted the content delivery request **Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, wherein the selected sub content specification information transmission unit is configured to transmit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, when the connection control system executes a process for establishing the connection **(the authentication service interpreted as "the connection control system" is configured to authenticate the user devices verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021)**, to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**.

However, AARTS does not specifically disclose a core IMS (Internet Protocol Multimedia Subsystem) part, via the core IMS part; play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Masahito teaches play-list information that is information containing the main content identification information contained in the content delivery

request and the selected sub content specification information **(playlist generating unit 13b extracts the CM (Commercial Message) data included in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135** ***Note: the examiner interpreted the CM data as the sub content information, and the content ID as the main content identification information*****)**, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(extracts the CM data included in the contents from the advertisement frame memory unit 16 and delivers the play list generation unit 13b, (M407); Page 35, Paragraph 0131 … the playlist to perform processing such as, play, and transmits it to the viewer's terminal; Page 37, Paragraph 0136)**.

It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Masahito with AARTS to deliver user-friendly advertisements in accordance with the video content **(Masahito: Page 1, Paragraph 0001)**.

However, the combination of AARTS and Masahito does not specifically disclose comprising a core IMS (Internet Protocol Multimedia Subsystem) part, via the core IMS part.

In an analogous art, Montpetit teaches comprising a core IMS (Internet Protocol Multimedia Subsystem) part **(the core network comprises an IP Multimedia Core**

Network Subsystem (IMS); Page 2, Paragraph 0018), via the core IMS part **(the core network comprises an IMS; Page 2, Paragraph 0018)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Montpetit to the modified system of AARTS and Masahito to provide an effective network services and application customization **(Montpetit: Page 1, Paragraph 0013)**.

Conclusion

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.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATALI N. PASCUAL PEGUERO whose telephone number is (571)272-4691. The examiner can normally be reached on Monday - Friday 11:30am - 8:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, UN C. CHO can be reached on (571)272-7919. 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 http://pair-direct.uspto.gov. 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.

/NATALI N PASCUAL PEGUERO/
Examiner, Art Unit 2413

/UN C. CHO/
Supervisory Patent Examiner, Art Unit 2413

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	40	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:22
L2	243	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:22
L3	52	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:23
L4	43416	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:23
L5	2	l1 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:23
L6	2	l2 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:23
L8	2	l3 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:24
L9	0	l4 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/23 01:24
S1	1	"13129756"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 12:02
S2	2	"20110225270"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 12:22
S4	4	"2008022298"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 15:13
S6	1	"12099489"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 15:55

S7	4	"10287835"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 16:29
S8	2	"20030105669"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 16:30
S16	2639	((core near2 IMS) or (core near2 (Internet adj Protocol adj Multimedia adj Subsystem)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:56
S17	1275	@ad< "20081118" and S16	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:57
S18	67	S17 and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:57
S19	60	S18 and (user near2 (device or equipment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:58
S23	20	S19 and "370".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:01
S24	20	S16 and S23	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:02
S25	18	S19 and "709".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:07
S26	1	"13063122"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 21:21
S32	21	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:17
S33	173	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:18
S34	36	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:18
S36	10	("20030105669" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:24
S37	40211	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	ON	2013/05/01 23:26

			JPO; DERWENT; IBM_TDB			
S38	21	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:28
S39	2	S38 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:28
S40	173	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S41	2	S40 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S42	36	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S43	2	S42 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S44	908	(Application near2 server) and (connection near2 control) and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:34
S45	502	@ad< "20081118" and S44	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:35
S46	235	S45 and ((user near2 (device or equipment)) and (storage) and (user near2 information))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:36
S47	19	S46 and 709/219,217.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
S48	5409367	(content delivery system).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
S49	2	S48 and S41	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
S50	702	S44 and (delivery)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:38
S51	44	S50 and 709/219,217.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:38

S52	37	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:40
S53	239	((KAZUO) near2 (ASAMI)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:41
S54	49	((KUNIHIRO) near2 (TANIGUCHI)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:41
S55	41734	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:42
S56	2	S52 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S57	2	S53 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S58	2	S54 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S59	0	S55 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S60	12	("20030105669" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:28
S61	2	S60 and attribute	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:28
S62	74272	(H04L29/08072 H04L29/06 H04L29/0809 H04L29/08981 H04L29/08117).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38
S63	3124	S62 and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38
S64	844	S63 and attribute	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38
S65	1509	"I14" and delivery	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:39
S66	14	S65 and (content near2 selection)	US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	ON	2014/02/20 15:39

			JPO; DERWENT; IBM_TDB			
S67	1	@ad< "20081118" and S66	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:40
S68	69263	@ad< "20081118" and S62	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:40
S69	159	S68 and (advertisement and (content near2 selection))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:41
S70	37	S69 and (application near2 server)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:41
S71	1	"13129756"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 13:41
S72	39	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:30
S73	241	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:30
S74	50	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:30
S75	42659	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
S77	2	S72 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
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S79	2	S74 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
S80	0	S75 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
S81	12	("20030105669" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:34

EAST Search History (Interference)

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3/ 23/ 2015 1:25:35 AM
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Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	Art Unit
	NATALI N PASCUAL PEGUERO	2413

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

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/01/2013	02/20/2014	09/05/2014	03/23/2015					
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4	4	✓	✓	✓	✓					
5	5	✓	✓	✓	✓					
6	6	✓	✓	✓	✓					
7	7	✓	✓	-	-					
8	8	✓	✓	✓	✓					
9	9	✓	✓	✓	✓					
10	10	✓	✓	✓	✓					
11	11	✓	✓	✓	✓					
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35	35		✓	✓	✓					
36	36		✓	✓	✓					

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	Art Unit
	NATALI N PASCUAL PEGUERO	2413

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

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/01/2013	02/20/2014	09/05/2014	03/23/2015					
37	37			✓	✓					
38	38			✓	✓					
39	39			✓	✓					
40	40			✓	✓					
41	41			✓	✓					

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	Art Unit
	NATALI N PASCUAL PEGUERO	2413

CPC- SEARCHED		
Symbol	Date	Examiner
H04L 29/08072, H04L 29/06, H04L 29/0809, H04L 29/08981 and H04L29/08117	2/20/2014	NP

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
709	217,219		

SEARCH NOTES		
Search Notes	Date	Examiner
East Search including keywords,class/subclass,inventor,assignee	5/1/2013	NP
IP.com Patent Search	5/1/2013	NP
Updated Search in EAST	2/20/2014	NP
H04L 29/08072, H04L 29/06, H04L 29/0809, H04L 29/08981 and H04L29/08117 (Text Search only)	2/20/2014	NP
Updated Search in EAST	9/5/2014	NP
Updated Search in EAST	3/23/2015	NP

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

/NATALI N PASCUAL PEGUERO/ Examiner.Art Unit 2413	

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Kunihiro Taniguchi et al.	Confirmation No.:	1971
Application No.:	13/129,756	Art Unit:	2413
Filed:	May 17, 2011	Examiner:	N. Pascual Peguero
Title:	CONTENT DELIVERY SYSTEM		

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT / RESPONSE TO NON-FINAL OFFICE ACTION

Dear Commissioner:

In response to the Office Action dated September 11, 2014, please amend the above-identified U.S. patent application as follows.

Amendments to the Claims begin on page 2 of this paper.

Remarks/Arguments begin on page 31 of this paper.

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A content delivery system comprising an application server system and a connection control system,

the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information,

the application server system comprising:

a content storage unit for storing sub content data representing sub content and main content data representing main content;

a delivery request reception unit for receiving a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

a sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via

the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

2. (Previously Presented) The content delivery system according to claim 1, wherein:

the user equipment comprises:

a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the application server system; and

a content viewing request transmission unit for transmitting, to the application server system, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system, and

the application server system comprises a content delivering unit for receiving the main

content viewing request transmitted by the user equipment and transmitting main content data identified by the main content identification information contained in the received main content viewing request to the user equipment, and for receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by the selected sub content specification information contained in the received sub content viewing request to the user equipment.

3. (Canceled)

4. (Previously Presented) The content delivery system according to claim 1, wherein:

the selected sub content specification information reception unit is configured to receive the play-list information transmitted by the application server system; and

the content viewing request transmission unit is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information.

5. (Previously Presented) The content delivery system according to claim 1, wherein:

the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of sub content represented by the sub content data;

the selection information contains user basic information that is information for specifying the attribute information and is information associated with user identification information for

identifying a user of the user equipment; and

the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the user basic information associated with the user identification information for identifying the user of the user equipment which has transmitted the content delivery request.

6. (Previously Presented) The content delivery system according to claim 1, wherein:

the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of the sub content represented by the sub content data;

the selection information contains content basic information that is information for specifying the attribute information and is information associated with the main content identification information for identifying the main content; and

the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the content basic information associated with the main content identification information contained in the received content delivery request.

7. (Canceled)

8. (Previously Presented) The content delivery system according to claim 1, wherein

the connection control system is configured to establish the connection by exchanging a

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predetermined connection establishment message with each of the user equipment and the application server system; and

the selected sub content specification information transmission unit is configured to transmit the selected sub content specification information to the user equipment via the connection control system by incorporating the selected sub content specification information in the connection establishment message.

9. (Previously Presented) The content delivery system according to claim 1, wherein:

the application server system comprises a service control server and a media server; and

the service control server comprises the delivery request reception unit, the sub content selection unit, and the selected sub content specification information transmission unit.

10. (Previously Presented) The content delivery system according to claim 1, wherein:

The application server system comprises a service control server and a media server;

the service control server comprises the delivery request reception unit;

the media server comprises the content storage unit, the sub content selection unit, and the selected sub content specification information transmission unit;

the service control server further comprises an selection information transmission unit for transmitting the selection information to the media server via the connection control system;

the media server further comprises an selection information reception unit for receiving the selection information transmitted by the service control server; and

the sub content selection unit is configured to select the sub content data based on the received selection information.

11. (Currently Amended) A content delivery system comprising an application server system and a connection control system,

the connection control system comprising a core IMS (Internet Protocol Multimedia Subsystem) part for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a media functions part for transmitting content data representing content to the user equipment with which connection is established by the core IMS part;

a service control functions part for controlling a service provided by the media functions part; and

a user profile server functions part for storing profile information of a user of the user equipment,

the media functions part comprising a content storage unit for storing sub content data representing sub content and main content data representing main content,

the service control functions part comprising:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the core IMS part; and

an sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content and preliminarily stored by the user profile server functions part, the service control functions part or the connection control system; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data via the core IMS part to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the

received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

12. (Previously Presented) The content delivery system according to claim 11, wherein:

the user equipment comprises:

a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the service control functions part; and

a content viewing request transmission unit for transmitting, to the media functions part, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information, when connection with the media functions part is established by the core IMS part, and

the media functions part comprises a content delivering unit for receiving the main content viewing request transmitted by the user equipment and transmitting to the user equipment main content data identified by the main content identification information contained in the received main content viewing request, and for receiving the sub content viewing request transmitted by the user equipment and transmitting to the user equipment sub content data specified by the selected sub content specification information contained in the received sub content viewing request.

13. (Previously Presented) The content delivery system according to claim 11, wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the media functions part, and outputting, based on the received main content data and

sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

14. (Previously Presented) The content delivery system according to claim 11, wherein

the selected sub content specification information reception unit is configured to receive the play-list information transmitted by the service control functions part; and

the content viewing request transmission unit is configured to transmit the main content viewing request and the sub content viewing request to the media functions part, based on the received play-list information.

15. (Currently Amended) A content delivery method comprising:

receiving equipment specification information transmitted by user equipment and establishing connection between an application server system and the user equipment based on the received equipment specification information, by a connection control system;

receiving a content delivery request containing main content identification information for identifying main content and transmitted by the user equipment, by the application server system;

selecting sub content data stored in a storing device for storing sub content data representing sub content and main content data representing main content, based on selection information containing attribute information representing an attribute of sub content;

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transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, by the application server system; and

transmitting, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output, by the application server system,

wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

16. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the selected sub content specification information transmitted by the application server system, by the user equipment;

transmitting, to the application server system, a main content viewing request containing the main content identification information and an sub content viewing request containing the received

selected sub content specification information, by the user equipment, when connection between the user equipment and the application server system is established by the connection control system; and

receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by main content identification information contained in the received main content viewing request to the user equipment, and receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by selected sub content specification information contained in the received sub content viewing request to the user equipment, by the application server system.

17. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the main content data and the sub content data transmitted by the application server system, and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data, by the user equipment.

18. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the play-list information transmitted by the application server system, by the user equipment; and

transmitting the main content viewing request and the sub content viewing request to the application server system based on the received play-list information, by the user equipment.

19. (Currently Amended) A service control server comprising:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via a connection control system establishing connection between a media server and the user equipment;

an sub content selection unit for selecting sub content data preliminarily stored in a storing device, based on selection information containing attribute information representing an attribute of sub content; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the

received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

20. (Canceled)

21. (Currently Amended) A user equipment comprising:

a selected sub content specification information reception unit for receiving selected sub content specification information selected based on selection information containing attribute information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application server system, via a connection control system establishing connection between the application server system and the user equipment, wherein the selected sub content specification information reception unit is configured to, when the connection control system executes a process for establishing the connection, receive the play-list information transmitted by the application server system, via the connection control system to the user equipment which has transmitted the content delivery request, wherein the play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output; ~~and~~

a content viewing request transmission unit for transmitting, to the application server system, a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system, wherein the content viewing request transmission unit is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information; and

a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

22. (Canceled)

23. (Canceled)

24. (Previously Presented) The content delivery system according to claim 1, wherein the sub content is advertisement content.

25. (Currently Amended) A content delivery system comprising an application server system and a connection control system,

the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information,

the application server system comprising:

content storage means for storing sub content data representing sub content and main content data representing main content;

delivery request reception means for receiving, a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

sub content selection means for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content; and

selected sub content specification information transmission means for transmitting selected sub content specification information for specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request,

wherein the selected sub content specification information transmission means is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main

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content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

26. (Currently Amended) A content delivery system comprising an application server system and a connection control system,

the connection control system comprising a core IMS (Internet Protocol Multimedia Subsystem) part for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a media functions part for transmitting content data representing content to the user equipment with which the connection is established by the core IMS part;

a service control functions part for controlling a service provided by the media functions part; and

a user profile server functions part for storing profile information of a user of the user equipment,

the media functions part comprising content storage means for storing sub content data

representing sub content and main content data representing main content,

the service control functions part comprising:

delivery request reception means for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the core IMS part; and

sub content selection means for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content and preliminarily stored by the user profile server functions part, the service control functions part or the connection control system; and

selected sub content specification information transmission means for transmitting selected sub content specification information for specifying the selected sub content data, via the core IMS part to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission means is configured to transmit, when the connection control system executes a process for establishing the connection, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a content outputting unit for receiving main content

data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

27. (Currently Amended) A service control server comprising:

delivery request reception means for receiving a content delivery request containing main content identification information for identifying main content and transmitted by user equipment, via a connection control system establishing connection between a media server and the user equipment;

sub content selection means for selecting sub content data preliminarily stored in a storing device based on selection information containing attribute information representing an attribute of sub content; and

selected sub content specification information transmission means for transmitting selected sub content specification information specifying the selected sub content data, via the connection control system to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission means is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by

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the main content identification information and the sub content specified by the selected sub content specification information are output,

wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

28. (Currently Amended) A user equipment comprising:

selected sub content specification information reception means for receiving selected sub content specification information selected based on selection information containing attribute information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application server system, via a connection control system establishing connection between the application server system and the user equipment, wherein the selected sub content specification information reception means is configured to, when the connection control system executes a process for establishing the connection, receive the play-list information transmitted by the application server system, via the connection control system to the user equipment which has transmitted the content delivery request, wherein the play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content

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specification information are output; ~~and~~

content viewing request transmission means for transmitting, to the application server system, a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information, when connection with the application server system is established by the connection control system, wherein the content viewing request transmission means is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information; and

a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

29. (Currently Amended) A server configured to perform operations comprising:

storing a plurality of sub content data and a plurality of main content data, wherein each of the plurality of sub content data is associated with one or more sub content attributes;

receiving a content delivery request from a user device, wherein the content delivery request identifies first main content data of the plurality of main content data;

selecting at least first sub content data and second sub content data from the plurality of sub content data based on the first sub content data and the second sub content data being associated with at least a particular attribute of the sub content attributes;

transmitting a first choice option corresponding to the first sub content data and a second choice option corresponding to the second sub content data to the user device; and

transmitting play-list information to the user device via a connection established by a connection control system, wherein the play-list information identifies the main content, the first sub content data, the second sub content data, and a sequence in which the main content, the first sub content data, the second sub content data are to be output,

wherein the user device comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

30. (Previously Presented) The server according to claim 29, wherein the server is further configured to perform operations comprising:

receiving a sub content viewing request from the user device, wherein the sub content viewing request contains a selected choice corresponding to either the first choice option or the second choice option;

transmitting the first sub content data to the user device as selected sub content data if the selected choice corresponds to the first choice option;

transmitting the second sub content data to the user device as the selected sub content data if the selected choice corresponds to the second choice option; and

transmitting the first main content data identified by the content delivery request to the user

device.

31. (Previously Presented) The server according to claim 30, wherein a user inputs a selection command to the user device to select the first choice option or the second choice option as the selected choice.

32. (Previously Presented) The server according to claim 30, wherein the server is further configured to perform operations comprising:

transmitting the first main content data and the selected sub content data to the user device for viewing on the user device.

33. (Previously Presented) The server according to claim 29, wherein the content delivery request from the user device contains user information about a user of the user device, and

wherein the server is further configured to perform operations comprising selecting the first sub content data and the second sub content data when the particular attribute corresponds to the user information.

34. (Previously Presented) The server according to claim 30, wherein the content delivery request from the user device contains user information about a user of the user device, and

wherein the server is further configured to perform operations comprising selecting the first sub content data and the second sub content data when the particular attribute corresponds to the

user information.

35. (Previously Presented) The server according to claim 29, wherein the server is further configured to perform operations comprising:

associating each of the plurality of main content data with one or more main content attributes;

selecting the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content.

36. (Previously Presented) The server according to claim 30, wherein the server is further configured to perform operations comprising:

associating each of the plurality of main content data with one or more main content attributes;

selecting the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content.

37. (Previously Presented) A content delivery system comprising an application server system and a connection control system,

the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information,

the application server system comprising:

a delivery request reception unit for receiving a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

a sub content selection unit for selecting the sub content data based on the equipment specification information or the main content identification information; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

38. (Previously Presented) A content delivery system comprising an application server system and a connection control system,

the connection control system comprising a core IMS (Internet Protocol Multimedia Subsystem) part for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a media functions part for transmitting content data representing content to the user equipment with which connection is established by the core IMS part;

a service control functions part for controlling a service provided by the media functions part; and

a user profile server functions part for storing profile information of a user of the user equipment, and

the service control functions part comprising:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the core IMS part; and

an sub content selection unit for selecting the sub content data based on the equipment specification information or the main content identification information; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data via the core IMS part to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission unit is configured to transmit, when the

connection control system executes a process for establishing the connection, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

39. (Previously Presented) A content delivery method comprising:

receiving equipment specification information transmitted by user equipment and establishing connection between an application server system and the user equipment based on the received equipment specification information, by a connection control system;

receiving a content delivery request containing main content identification information for identifying main content and transmitted by the user equipment, by the application server system;

selecting sub content data representing sub content based on the equipment specification information or the main content identification information;

transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, by the application server system; and

transmitting, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the

content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output, by the application server system.

40. (Previously Presented) A non-transitory computer program comprising instructions for causing a service control server to realize:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via a connection control system establishing connection between a media server and the user equipment;

an sub content selection unit for selecting content data based on the main content identification information; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, and

the selected sub content specification information transmission unit for transmitting, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list

information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

41. (Previously Presented) A service control server comprising:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via a connection control system establishing connection between a media server and the user equipment;

an sub content selection unit for selecting sub content data based on the main content identification information; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, and

the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is

information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

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REMARKS

Claims 1-6, 8-19, 21, 22, and 24-41 have been examined. Claims 1, 5-9, 11, 14, 19-21 and 24-26 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting and claims 1-6, 8-19, 21, 22, and 24-41 were rejected under 35 U.S.C. § 103(a).

I. Double Patenting Rejection

Claims 1, 5-9, 11, 14, 19-21 and 24-26 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 6-8, 11, 13 and 19-24 of copending U.S. Application No. 13/063122. Office Action at 3.

A. Claim 1

Independent claim 1 has been amended to incorporate the limitations of dependent claim 3. The Examiner does not assert that dependent claim 3 is unpatentable on the ground of nonstatutory obviousness-type double patenting. Accordingly, Applicants submit the provisional obviousness-type double patenting rejection of claim 1 should be withdrawn for at least the reason that claim 1 incorporates the limitations of dependent claim 3.

B. Claims 5-6, 8-9, and 24

Dependent claims 5-6, 8-9, and 24 depend on claim 1. Accordingly, dependent claims 5-6, 8-9, and 24 are patentable at least based on their dependency.

C. Claim 11, 19, 21, 25, and 26

Independent claims 11, 19, 21, 25, and 26 have been amended to recite subject matter similar or analogous to claim 3. Accordingly, Applicants submit the provisional obviousness-type double patenting rejection of claims 11, 19, 21, 25, and 26 should be withdrawn.

D. Claim 14

Dependent claim 14 depends on claim 11. Accordingly, dependent claim 14 is patentable at least based on its dependency.

E. Claims 7 and 20

Claims 7 and 20 have been canceled without prejudice or disclaimer. Accordingly, Applicants submit the provisional rejection is moot with respect to claims 7 and 20.

II. Rejection under 35 USC § 103(a) over U.S. Patent Application Publication No. 2008/0256216 to AARTS ("AARTS") in view of U.S. Patent Application Publication No. 2008/022298 to Masahito ("Masahito")

Claims 1-6, 8-10, 15-19, 21, 22, 24, 25, 27-37 and 39-41 were rejected under 35 USC § 103(a) over AARTS in view of Masahito. Office Action at 8.

A. Claim 1

Applicants submit that AARTS alone or in combination with Masahito does not disclose all of the features of claim 1. For example, claim 1 states that a selected sub content specification information transmission unit is configured to transmit, when a connection control system executes a process for establishing the connection, via the connection control system to a user equipment which has transmitted a content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and

the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output. AARTS alone or in combination with Masahito fails to disclose or even suggest this limitation.

For example, the Examiner states:

> AARTS does not specifically disclose play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

Office Action at 10.

Moreover, AARTS fails to disclose or even suggest a selected sub content specification information transmission unit is configured to ***transmit, when a connection control system executes a process for establishing a connection***, via the connection control system to a user equipment which has transmitted a content delivery request, ***the claimed play-list information***. In a non-limiting embodiment of the invention, the process for establishing a connection and the process for transmitting the play-list information can thus advantageously be executed concurrently, rather than being required to establish a connection and then thereafter transmit the play-list information.

By contrast, in AARTS, the advertisement service 13 transmits an authentication request 17 to the authentication server 16 (alleged "connection control system") at step 31 and receives an authentication response from the authentication service 16 (alleged "connection control system") at step 32, and an advertisement service generates advertisement information at step 33 and transmits

it to the user device 10 at step 34. AARTS at paragraph [0023]. AARTS fails to disclose or even suggest that a selected sub content specification information transmission unit is configured to ***transmit the claimed play-list information when a connection control system executes a process for establishing a connection***, much less that a selected sub content specification information transmission unit is configured to transmit, when a connection control system executes a process for establishing a connection, via the connection control system to a user equipment which has transmitted a content delivery request, the claimed play-list information, as claimed.

Also, Masahito does not cure the deficient teachings of AARTS. In Masahito, a content server 11, a picture distribution server 13, an advertisement frame management server 12, a distribution entrepreneur terminal 3 operated by a distribution entrepreneur, an advertisement agency entrepreneur terminal 4 operated by an advertisement agency entrepreneur, and a TV viewer terminal 5 operated by a TV viewer are connected via a network 100 to distribute an advertisement insertion type picture by the use of these devices. Masahito at Abstract. AARTS fails to disclose or even suggest that a selected sub content specification information transmission unit is configured to ***transmit the claimed play-list information when a connection control system executes a process for establishing a connection***, much less that a selected sub content specification information transmission unit is configured to transmit, when a connection control system executes a process for establishing a connection, via the connection control system to a user equipment which has transmitted a content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a

sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output, as claimed.

Accordingly, Applicants submit that claim 1 is patentable for at least the reasons presented above.

B. Claims 2, 4-6, 8-10, and 24

Since claims 2, 4-6, 8-10, and 24 depend on claim 1, they are patentable at least based on their dependency.

C. Claims 15, 19, 21, 25, 27-29, 37, and 39-41

Claims 15, 19, 21, 25, 27-29, 37, and 39-41 contain features that are similar or analogous to those discussed in conjunction with claim 1. Therefore, Applicants submit that these claims are patentable for at least similar reasons.

D. Claims 16-18 and 30-36

Since claims 16-18 and 30-36 depend on claims 15 and 29, they are patentable at least based on their dependency.

E. Claim 3 and 22

Claim 3 and 22 have been canceled without prejudice or disclaimer. Accordingly, Applicants request the rejection of claims 3 and 22 be withdrawn.

III. Rejection under 35 USC § 103(a) over AARTS in view of Masahito and further in view of U.S. Patent Application Publication No. 2007/0223523 to Montpetit et al. ("Montpetit")

Claims 11-14, 26, and 38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over AARTS in view of Masahito and further in view of Montpetit. Office Action at 39.

A. Claims 11, 26, and 38

Claims 11, 26, and 38 contain features that are similar or analogous to those discussed in conjunction with claim 1, and since Montpetit does not cure the deficient teachings of AARTS and Masahito with respect to claim 1, Applicants submit that claims 11, 26, and 38 are patentable for at least similar reasons.

B. Claims 12-14

Since claims 12-14 depend upon claim 11, and since the Montpetit does not cure the deficient teachings of AARTS and Masahito with respect to claim 11, claims 12-14 are patentable at least based on their dependency.

IV. Conclusion

Applicants believe the pending application is in condition for allowance. Applicants believe no other fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-0219, under Order No. 2207946.00141US1, from which the undersigned is authorized to draw.

Respectfully submitted,

Dated: November 26, 2014

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Electronic Acknowledgement Receipt

EFS ID:	20806305
Application Number:	13129756
International Application Number:	
Confirmation Number:	1971
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Customer Number:	71799
Filer:	Michael Hal Smith/Ondine Marquer
Filer Authorized By:	Michael Hal Smith
Attorney Docket Number:	J-11-0248
Receipt Date:	26-NOV-2014
Filing Date:	17-MAY-2011
Time Stamp:	12:17:57
Application Type:	U.S. National Stage under 35 USC 371

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		NEC_141US1_Response_to_Non_Final_Office_Action_for_November_26_2014_filing.PDF	288241 88f04f498a2ff2927a01b262c1e988207a6be644	yes	37

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	30
	Applicant Arguments/Remarks Made in an Amendment	31	37
Warnings:			
Information:			
	Total Files Size (in bytes):	288241	

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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.

PTO/SB/06 (09-11)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/129,756	Filing Date 05/17/2011	☐ To be Mailed

ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) 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), (i), 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 $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ 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

AMENDMENT	11/26/2014	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 36	Minus	** 36	= 0	X $80 =	0
	Independent (37 CFR 1.16(h))	* 15	Minus	***10	= 5	X $420 =	2100
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	**2100**

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
	☐ 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.
** 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 number found in the appropriate box in column 1.

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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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Mr. Ryoichi Harada
2100 Pennsylvania Ave., NW
SUITE 560
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Courtesy Reminder for
Application Serial No: 13/129,756

Attorney Docket No: J-11-0248
Customer Number: 71799
Date of Electronic Notification: 09/11/2014

This is a courtesy reminder that new correspondence is available for this application. If you have not done so already, please review the correspondence. The official date of notification of the outgoing correspondence will be indicated on the form PTOL-90 accompanying the correspondence.

An email notification regarding the correspondence was sent to the following email address(es) associated with your customer number:

Satoko.Kajima@necam.com
necipca@necam.com
ryoichi.harada@necam.com

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/129,756	05/17/2011	Kunihiro Taniguchi	J-11-0248	1971

71799 7590 09/11/2014

Mr. Ryoichi Harada
2100 Pennsylvania Ave., NW
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EXAMINER	
PASCUAL PEGUERO, NATALI	
ART UNIT	PAPER NUMBER
2413	

NOTIFICATION DATE	DELIVERY MODE
09/11/2014	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):

ryoichi.harada@necam.com
Satoko.Kajima@necam.com
necipca@necam.com

Office Action Summary	Application No. 13/129,756	Applicant(s) TANIGUCHI ET AL.	
	Examiner NATALI N. PASCUAL PEGUERO	Art Unit 2413	AIA (First Inventor to File) 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 *03 June 2014*.

☐ 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) *1-6,8-19,21,22 and 24-41* 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) *1-6, 8-19, 21, 22 and 24-41* 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 _____ 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: _____.

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

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on **June 03, 2014** has been entered.

Response to Arguments

3. Applicant's arguments filed in the amendment filed 06/03/2014 have been considered but are moot in view of the new ground(s) of rejection.

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 obviousness-type 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); and *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 a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims **1, 5 - 9, 11, 14, 19 - 21 and 24-26** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims **1 - 3, 6 - 8, 11, 13 and 19 - 24** of copending Application **No. 13/063122**. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed limitations are similar in scope with broader recitation. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Interpretation - 35 USC § 112

The following is a quotation of 35 U.S.C. 112(f):

> (f) Element in Claim for a Combination. – An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

The following is a quotation of pre-AIA 35 U.S.C. 112, sixth paragraph:

> An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

Use of the word “means” (or “step for”) in a claim with functional language creates a rebuttable presumption that the claim element is to be treated in accordance with 35 U.S.C. § 112(f) (pre-AIA 35 U.S.C. 112, sixth paragraph). The presumption that § 112(f) (pre-AIA § 112, sixth paragraph) is invoked is rebutted when the function is

recited with sufficient structure, material, or acts within the claim itself to entirely perform the recited function.

Absence of the word “means” (or “step for”) in a claim creates a rebuttable presumption that the claim element is not to be treated in accordance with 35 U.S.C. § 112(f) (pre-AIA 35 U.S.C. 112, sixth paragraph). The presumption that § 112(f) (pre-AIA § 112, sixth paragraph) is not invoked is rebutted when the claim element recites function but fails to recite sufficiently definite structure, material or acts to perform that function.

Claim elements in this application that use the word “means” (or “step for”) are presumed to invoke § 112(f) except as otherwise indicated in an Office action. Similarly, claim elements that do not use the word “means” (or “step for”) are presumed not to invoke § 112(f) except as otherwise indicated in an Office action.

The limitations of claims **25 - 28** that recite(s) “content storage means for storing sub content data representing sub content and main content data representing main content; delivery request reception means for receiving, a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content; sub content selection means for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content; and selected sub content specification information transmission means for transmitting selected sub content specification information for specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request,

wherein the selected sub content specification information transmission means is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output; the media functions part comprising content storage means for storing sub content data representing sub content and main content data representing main content, the service control functions part comprising: delivery request reception means for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the core IMS part; and sub content selection means for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content and preliminarily stored by the user profile server functions part, the service control functions part or the connection control system ….” without reciting sufficient structure to achieve the function. Furthermore, the non-structural term is not preceded by a structural modifier.

Since this claim limitation invokes 35 U.S.C. 112(f) or 35 U.S.C. 112 (pre-AIA), sixth paragraph, claims **25 - 28** are interpreted to cover the corresponding structure

described in the specification that achieves the claimed functions, and equivalents thereof.

A review of the specification shows that the following appears to be the corresponding structure described in the specification for the 35 U.S.C. 112(f) or 35 U.S.C. 112 (pre-AIA), sixth paragraph limitation: Page 15, Paragraphs 0250 - 0253 of the specification discloses that “The content delivery system 1 further includes a content storage (content storage means) RC, delivery request receiver (delivery request reception means) 101, an advertisement content selector (advertisement content selection means) 102, and a selected advertisement content specification information transmitter (selected advertisement content specification information transmission means) 103. The content storage RC stores advertisement content data representing advertisement content and main content data representing main content. The delivery request receiver 101 receives, via the connection control system 3, a content delivery request containing main content identification information for identifying main content and transmitted by the user equipment 2. The advertisement content selector 102 selects the advertisement content data stored in the content storage RC based on advertisement selection information containing advertisement attribute information representing an attribute of the advertisement content. The selected advertisement content specification information transmitter 103 transmits selected advertisement content specification information for specifying advertisement content data selected by the advertisement content selector 102 via the connection control system 3 to the user

equipment 2 which has transmitted the content delivery request". (See also Paragraphs 0049, 0254 and 0026).

If applicant wishes to provide further explanation or dispute the examiner's interpretation of the corresponding structure, applicant must identify the corresponding structure with reference to the specification by page and line number, and to the drawing, if any, by reference characters in response to this Office action.

If applicant does **not** wish to have the claim limitation treated under 35 U.S.C. 112(f) or 35 U.S.C. 112 (pre-AIA), sixth paragraph, applicant may amend the claim so that it will clearly not invoke 35 U.S.C. 112(f) or 35 U.S.C. 112 (pre-AIA), sixth paragraph, or present a sufficient showing that the claim recites sufficient structure, material, or acts for performing the claimed function to preclude application of 35 U.S.C. 112(f) or 35 U.S.C. 112 (pre-AIA), sixth paragraph.

For more information, see MPEP § 2173 et seq. and *Supplementary Examination Guidelines for Determining Compliance with 35 U.S.C. § 112 and for Treatment of Related Issues in Patent Applications*, 76 FR 7162, 7167 (Feb. 9, 2011).

Claim Rejections - 35 USC § 103

5. 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 of this title, 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 negatived by the manner in which the invention was made.

6. Claim 1 - 6, 8 - 10, 15 - 19, 21, 22, 24, 25, 27 - 37 and 39 – 41 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over AARTS (Pub # US 2008/0256216 A1) in view of Masahito et al. (JP 2008022298 hereinafter Masahito, disclosed by the Applicant's IDS).

Regarding claim 1, AARTS teaches a content delivery system **(a method of supplying advertising content; Page 1, Paragraph 0001)** comprising an application server system **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** and a connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)**, the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information **(the authentication service interpreted as "the connection control system" is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021)**, the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)** comprising: a content storage unit for storing sub content data representing sub content and main content data representing main content **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), and may also track advertisement data sent to a particular user or device; Page 2, Paragraph 0021)**; a delivery request reception unit for receiving **(the advertisement device is operable to**

receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021) a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**; a sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** via the connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement**

service; Page 2, Paragraph 0022), wherein the selected sub content specification information transmission unit is configured to transmit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, when the connection control system executes a process for establishing the connection **(the authentication service interpreted as "the connection control system" is configured to authenticate the user devices verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021)**, via the connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**.

However, AARTS does not specifically disclose play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Masahito teaches play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the

main content identification information and the sub content specified by the selected sub content specification information are output **(Playlist generating unit 13b extracts the CM (Commercial Message) data included in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135 … extracts the CM data included in the contents from the advertisement frame memory unit 16 and delivers the play list generation unit 13b, (M407); Page 35, Paragraph 0131 … The video distribution server 13, extracts the advertisement frame associated to content ID with a distribution request from the advertisement frame memory unit 16, and checks whether the advertisement frame according to a user attribute is set up in the placement decision service in (S103); Page 36, Paragraph 0132).**

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Masahito with AARTS to deliver user-friendly advertisements in accordance with the video content **(Masahito: Page 1, Paragraph 0001)**.

Regarding claim 2, AARTS discloses wherein: the user equipment comprises **(the user device interpreted as "user equipment"; Page 2, Paragraph 0021)**: a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the application server system **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and a content viewing request

transmission unit for transmitting **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**, and the application server system comprises a content delivering unit for receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by the main content identification information contained in the received main content viewing request to the user equipment **(the advertisement service receives a data request in the store (Fig. 1, element 13a) from the user device in accordance to the user's desired content transmitted by the authentication service, and at step 34 transmits the advertisement information to the user device 10; Page 2, Paragraphs 0021 - 0023)**, and for receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by the selected sub content specification information contained in the received sub content viewing request to the user equipment **(Fig. 3, step 30 shows that the advertisement service receives the data request**

from the user device, and at step 34 transmits the advertisement information to the user device; Page 2, Paragraph 0023).

Regarding claim 3, AARTS discloses wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

Regarding claim 4, AARTS teaches wherein: the content viewing request transmission unit is configured to transmit **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** the main content viewing request and the sub content viewing request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph**

0022) to the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**.

However, AARTS does not specifically disclose the selected sub content specification information reception unit is configured to receive the play-list information transmitted by the application server system; based on the received play-list information.

In an analogous art, Masahito teaches the selected sub content specification information reception unit is configured to receive the play-list information transmitted by the application server system **(determining the playlist to perform processing such as replacing the CM, to play, and transmits it to the viewer terminal 5 (M409); Page 36, Paragraph 0134)**; based on the received play-list information **(Playlist generating unit 13b extracts the CM (Commercial Message) data included in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135 … extracts the CM data included in the contents from the advertisement frame memory unit 16 and delivers the play list generation unit 13b, (M407); Page 35, Paragraph 0131 … The video distribution server 13, extracts the advertisement frame associated to content ID with a distribution request from the advertisement frame memory unit 16, and checks whether the advertisement frame according to a user attribute is set up in the placement decision service in (S103); Page 36, Paragraph 0132)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Masahito with AARTS to deliver user-friendly advertisements in accordance with the video content **(Masahito: Page 1, Paragraph 0001)**.

Regarding claim 5, AARTS discloses wherein: the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of sub content represented by the sub content data **(the content service (Fig. 1, element 11) interpreted as "the content storage unit" is configured to store the content information comprising content data to be used in providing an output to the user, and metadata interpreted as to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; the selection information contains user basic information that is information for specifying the attribute information and is information associated with user identification information for identifying a user of the user equipment **(in the system of Fig. 5, the user device receives content data and metadata, but in this example the metadata comprises a pointer to authentications service, and the fig. 4, step 41 shows that the authentication service identifies the user device from the information transmitted; Page 2, Paragraph 0024 and 0029)**; and the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the user basic information **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's**

recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013) associated with the user identification information for identifying the user **(at step 33, the advertisement service generates advertisement information in accordance with the received authentication information used for identifying the user device; Page 2, Paragraph 0023)** of the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**.

Regarding claim 6, AARTS discloses wherein: the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of the sub content represented by the sub content data **(the content service (Fig. 1, element 11) interpreted as "the content storage unit" is configured to store the content information comprising content data to be used in providing an output to the user, and metadata to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; the selection information contains content basic information that is information for specifying the attribute information and is information associated with the main content identification information for identifying the main content **(the content information comprising content data to be used in providing an output to the user, and metadata to**

enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022); and the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the content basic information associated with the main content identification information **(the authentication service transmits general information thus allowing an advertisement to be personalized to the user, such as age, gender, geographic information or any other information as appropriate. At step 33, the advertisement service generates advertisement information in accordance with the received authentication information; Page 2, Paragraph 0023)** contained in the received content delivery request **(Fig. 3, step 30 shows that the advertisement service receives the data request from the user device; Page 2, Paragraph 0023)**.

Regarding claim 8, AARTS discloses wherein the connection control system is configured to establish the connection by exchanging a predetermined connection establishment message with each of the user equipment and the application server system **(the authentication service interpreted as "the connection control system" is configured to authenticate the user devices verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021)**; and the selected sub content specification information transmission unit is configured to transmit the selected sub content specification information to the user equipment **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** via the connection control system **(the**

authentication service interpreted as "the connection control system"; Page 2, Paragraph 0021) by incorporating the selected sub content specification information in the connection establishment message **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information used for establishing connection with the user device; Page 2, Paragraph 0023)**.

Regarding claim 9, AARTS discloses wherein: the application server system comprises a service control server and a media server **(an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and the service control server comprises the delivery request reception unit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, the sub content selection unit **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**, and the selected sub content specification information transmission unit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding claim 10, AARTS discloses wherein: The application server system comprises a service control server and a media server **(an advertisement server (Fig.**

1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013); the service control server comprises the delivery request reception unit **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)**; the media server comprises the content storage unit **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), the sub content selection unit (Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**, and the selected sub content specification information transmission unit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**; the service control server further comprises an selection information transmission unit for transmitting the selection information to the media server **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information; Page 2, Paragraph 0023)** via the connection control system **(the authentication service interpreted as "the connection control system"; Page 2, Paragraph 0021)**; the media server further comprises an selection information reception unit for receiving the selection information transmitted by the service control server **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement**

service; Page 2, Paragraph 0022); and the sub content selection unit is configured to select the sub content data based on the received selection information **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

Regarding claim 15, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding claim 16, the claim is interpreted and rejected for the same reason as set forth in claim 2.

Regarding claim 17, the claim is interpreted and rejected for the same reason as set forth in claim 3.

Regarding claim 18, the claim is interpreted and rejected for the same reason as set forth in claim 4.

Regarding claim 19, AARTS teaches a server control server **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** comprising: a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content **(the advertisement device is operable to receive a data request (Fig. 1, element 14) from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)** and transmitted by a user equipment **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** via a connection control system

establishing connection between a media server and the user equipment **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; an sub content selection unit for selecting sub content data preliminarily stored in a storing device **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**, based on selection information containing attribute information representing an attribute of sub content **(the content information comprising content data to be used in providing an output to the user, and metadata to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected content data via the connection control system to the user equipment which has transmitted the content delivery request **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, wherein the selected sub content specification information transmission unit is configured to transmit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, when the connection control system executes a process for establishing the connection **(the authentication service interpreted as "the connection control system" is configured to authenticate the user devices**

verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021), via the connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**,

However, AARTS does not specifically disclose play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Masahito teaches play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(Playlist generating unit 13b extracts the CM (Commercial Message) data included in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135 … extracts the CM data included in the contents from the advertisement frame**

memory unit 16 and delivers the play list generation unit 13b, (M407); Page 35, Paragraph 0131 … The video distribution server 13, extracts the advertisement frame associated to content ID with a distribution request from the advertisement frame memory unit 16, and checks whether the advertisement frame according to a user attribute is set up in the placement decision service in (S103); Page 36, Paragraph 0132).

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Masahito with AARTS to deliver user-friendly advertisements in accordance with the video content **(Masahito: Page 1, Paragraph 0001)**.

Regarding claim 21, AARTS teaches a user equipment comprising **(the user device interpreted as "user equipment"; Page 2, Paragraph 0021)**: a selected sub content specification information reception unit for receiving selected sub content specification information **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)** selected based on selection information containing attribute information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application server system **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 …**

an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013), via a connection control system establishing connection between the application server system and the user equipment **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; wherein the selected sub content specification information reception unit **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)** is configured to, when the connection control system executes a process for establishing the connection **(the authentication service interpreted as "the connection control system" is configured to authenticate the user devices verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021)**, via the connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**; and a content viewing request transmission unit for transmitting **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the application server system **(the advertisement service interpreted as "the application service system"; Page**

2, Paragraph 0021), a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**, wherein the content viewing request transmission unit **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the media functions part **(the advertisement service interpreted as "the media functions part"; Page 2, Paragraph 0021)** is configured to transmit the main content viewing request and the sub content viewing request to the application server system **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**.

However, AARTS does not specifically disclose receive the play-list information transmitted by an application server system, wherein the play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by

the selected sub content specification information are output; based on the received play-list information.

In an analogous art, Masahito teaches receive the play-list information transmitted by an application server system **(determining the playlist to perform processing such as replacing the CM, to play, and transmits it to the viewer terminal 5 (M409); Page 36, Paragraph 0134)**, wherein the play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(playlist generating unit 13b extracts the CM (Commercial Message) data included in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135 … extracts the CM data included in the contents from the advertisement frame memory unit 16 and delivers the play list generation unit 13b, (M407); Page 35, Paragraph 0131 … The video distribution server 13, extracts the advertisement frame associated to content ID with a distribution request from the advertisement frame memory unit 16, and checks whether the advertisement frame according to a user attribute is set up in the placement decision service in (S103); Page 36, Paragraph 0132)**; based on the received play-list information **(Playlist generating unit 13b extracts the CM (Commercial Message) data included**

in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135).

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Masahito with AARTS to deliver user-friendly advertisements in accordance with the video content **(Masahito: Page 1, Paragraph 0001)**.

Regarding claim 22, the claim is interpreted and rejected for the same reason as set forth in claim 3.

Regarding claim 24, AARTS discloses wherein the sub content is advertisement content **(advertisement information; Page 1, Paragraph 0005)**.

Regarding claim 25, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding claim 27, the claim is interpreted and rejected for the same reason as set forth in claim 19.

Regarding claim 28, the claim is interpreted and rejected for the same reason as set forth in claim 21.

Regarding claim 29, AARTS teaches a server configured to perform operations comprising: storing a plurality of sub content data and a plurality of main content data **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), and may also track advertisement data sent to a particular user or device; Page 2, Paragraph 0021)**, wherein each of the plurality of sub content data is

associated with one or more sub content attributes **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)** ; receiving a content delivery request from a user device **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)**, wherein the content delivery request identifies first main content data of the plurality of main content data **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**; selecting at least first sub content data and second sub content data from the plurality of sub content data based on the first sub content data and the second sub content data being associated with at least a particular attribute of the sub content attributes **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**; transmitting a first choice option corresponding to the first sub content data and a

second choice option corresponding to the second sub content data to the user device **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose transmitting play-list information to the user device via a connection established by a connection control system, wherein the play-list information identifies the main content, the first sub content data, the second sub content data, and a sequence in which the main content, the first sub content data, the second sub content data are to be output.

In an analogous art, Masahito teaches transmitting play-list information to the user device via a connection established by a connection control system, wherein the play-list information identifies the main content, the first sub content data, the second sub content data, and a sequence in which the main content, the first sub content data, the second sub content data are to be output **(Playlist generating unit 13b extracts the CM (Commercial Message) data included in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135 … extracts the CM data included in the contents from the advertisement frame memory unit 16 and delivers the play list generation unit 13b, (M407); Page 35, Paragraph 0131 … The video distribution server 13, extracts the advertisement frame associated to content ID with a distribution request from the advertisement frame memory unit 16, and checks whether the advertisement frame according to**

a user attribute is set up in the placement decision service in (S103); Page 36, Paragraph 0132).

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Masahito with AARTS to deliver user-friendly advertisements in accordance with the video content **(Masahito: Page 1, Paragraph 0001)**.

Regarding claim 30, AARTS discloses wherein the server is further configured to perform operations comprising: receiving a sub content viewing request from the user device, wherein the sub content viewing request contains a selected choice corresponding to either the first choice option or the second choice option **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**; transmitting the first sub content data to the user device as selected sub content data if the selected choice corresponds to the first choice option; transmitting the second sub content data to the user device as the selected sub content data if the selected choice corresponds to the second choice option **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**; and transmitting the first main content data identified by the content delivery request to the user device **(Fig. 3,**

step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023).

Regarding claim 31, AARTS discloses wherein a user inputs a selection command to the user device to select the first choice option or the second choice option as the selected choice **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**.

Regarding claim 32, AARTS discloses wherein the server is further configured to perform operations comprising: transmitting the first main content data and the selected sub content data to the user device for viewing on the user device **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding claim 33, AARTS discloses wherein the content delivery request from the user device contains user information about a user of the user device **(the user information store (Fig. 1, element 16a) comprise demographic information corresponding to the user; Page 1, Paragraph 0010)**, and wherein the server is further configured to perform operations comprising selecting the first sub content data and the second sub content data when the particular attribute corresponds to the user information **(an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in**

accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013).

Regarding claim 34, the claim is interpreted and rejected for the same reason as set forth in claim 33.

Regarding claim 35, AARTS discloses wherein the server is further configured to perform operations comprising: associating each of the plurality of main content data with one or more main content attributes **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**; selecting the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**.

Regarding claim 36, the claim is interpreted and rejected for the same reason as set forth in claim 35.

Regarding claim 37, AARTS teaches a content delivery system **(a method of supplying advertising content; Page 1, Paragraph 0001)** comprising an application server system **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** and a connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)**, the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information **(the authentication service interpreted as "the connection control system" is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021)**, the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)** comprising: a delivery request reception unit for receiving **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)** a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**; a sub content selection unit for selecting the sub

content data based on the equipment specification information or the main content identification information **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** via the connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, wherein the selected sub content specification information transmission unit is configured to transmit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, when the connection control system executes a process for establishing the connection **(the authentication service interpreted as "the connection control system" is configured to authenticate the user devices**

verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021), via the connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**.

However, AARTS does not specifically disclose play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Masahito teaches play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(Playlist generating unit 13b extracts the CM (Commercial Message) data included in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135 … extracts the CM data included in the contents from the advertisement frame**

memory unit 16 and delivers the play list generation unit 13b, (M407); Page 35, Paragraph 0131 … The video distribution server 13, extracts the advertisement frame associated to content ID with a distribution request from the advertisement frame memory unit 16, and checks whether the advertisement frame according to a user attribute is set up in the placement decision service in (S103); Page 36, Paragraph 0132).

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Masahito with AARTS to deliver user-friendly advertisements in accordance with the video content **(Masahito: Page 1, Paragraph 0001)**.

Regarding claim 39, the claim is interpreted and rejected for the same reason as set forth in claim 37.

Regarding claim 40, AARTS teaches a non-transitory computer program comprising instructions for causing a service control server to realize: a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content **(the advertisement device is operable to receive a data request (Fig. 1, element 14) from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)** and transmitted by a user equipment **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** via a connection control system establishing connection between a media server and the user equipment **(Fig. 3, step**

31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023); an sub content selection unit for selecting content data based on the main content identification information **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, and the selected sub content specification information transmission unit for transmitting **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, when the connection control system executes a process for establishing the connection **(the authentication service interpreted as "the connection control system" is configured to authenticate the user devices verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021)**, via the connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery

request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**.

However, AARTS does not specifically disclose play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Masahito teaches play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(Playlist generating unit 13b extracts the CM (Commercial Message) data included in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135 … extracts the CM data included in the contents from the advertisement frame memory unit 16 and delivers the play list generation unit 13b, (M407); Page 35, Paragraph 0131 … The video distribution server 13, extracts the advertisement frame associated to content ID with a distribution request from the advertisement frame memory unit 16, and checks whether the advertisement frame according to**

a user attribute is set up in the placement decision service in (S103); Page 36, Paragraph 0132).

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Masahito with AARTS to deliver user-friendly advertisements in accordance with the video content **(Masahito: Page 1, Paragraph 0001)**.

Regarding claim 41, the claim is interpreted and rejected for the same reason as set forth in claim 40.

7. Claims 11 - 14, 26 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over AARTS in view of Masahito, and further in view of Montpetit et al. (Pub # US 2007/0223523 A1 hereinafter Montpetit).

Regarding claim 11, AARTS teaches a content delivery system **(a method of supplying advertising content; Page 1, Paragraph 0001)** comprising an application server system **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** and a connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)**, the connection control system for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information **(the authentication service interpreted as "the connection control system" is configured to receive information corresponding to identified users in order to permit communication between the**

advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021), the application server system comprising **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**: a media functions part for transmitting content data representing content to the user equipment **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** with which the connection is established **((Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; a service control functions part for controlling a service provided by the media functions part **(an advertisement server is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and a user profile server functions part for storing profile information of a user of the user equipment **(the user information store (Fig. 1, element 16a) comprise demographic information corresponding to the user; Page 1, Paragraph 0010)**, the media functions part comprising a content storage unit for storing sub content data representing sub content and main content data representing main content **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), and may also track advertisement data sent to a particular user or device; Page 2, Paragraph 0021)**, the service control functions part comprising: a delivery request reception unit for receiving **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)** a content delivery

request containing main content identification information for identifying the main content and transmitted by the user equipment content **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**; and an sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)** and preliminarily stored by the user profile server functions part **(Fig. 2, step 21 shows that the user device receives data including content information from the content service; Page 2, Paragraph 0022)**, the service control functions part or the connection control system **(the authentication service interpreted as "the connection control system"; Page 2, Paragraph 0021)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data to the user equipment which has transmitted the content delivery request **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, wherein the selected sub content specification information transmission unit is configured to transmit **(Fig. 3, step 34 shows that the advertisement service transmits the**

advertisement information to the user device; Page 2, Paragraph 0023), when the connection control system executes a process for establishing the connection **(the authentication service interpreted as "the connection control system" is configured to authenticate the user devices verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021)**, to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**.

However, AARTS does not specifically disclose a core IMS (Internet Protocol Multimedia Subsystem) part, via the core IMS part; play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Masahito teaches play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(Playlist generating unit 13b extracts the CM (Commercial Message) data included in the contents to be reproduced from**

the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135 … extracts the CM data included in the contents from the advertisement frame memory unit 16 and delivers the play list generation unit 13b, (M407); Page 35, Paragraph 0131 … The video distribution server 13, extracts the advertisement frame associated to content ID with a distribution request from the advertisement frame memory unit 16, and checks whether the advertisement frame according to a user attribute is set up in the placement decision service in (S103); Page 36, Paragraph 0132).

It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Masahito with AARTS to deliver user-friendly advertisements in accordance with the video content **(Masahito: Page 1, Paragraph 0001)**.

However, the combination of AARTS and Masahito does not specifically disclose comprising a core IMS (Internet Protocol Multimedia Subsystem) part, via the core IMS part.

In an analogous art, Montpetit teaches comprising a core IMS (Internet Protocol Multimedia Subsystem) part **(the core network comprises an IP Multimedia Core Network Subsystem (IMS); Page 2, Paragraph 0018)**, via the core IMS part **(the core network comprises an IMS; Page 2, Paragraph 0018)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Montpetit to the modified

system of AARTS and Masahito to provide an effective network services and application customization **(Montpetit: Page 1, Paragraph 0013)**.

Regarding claim 12, the combination of AARTS and Masahito, specifically AARTS teaches wherein: the user equipment comprises **(the user device interpreted as "user equipment"; Page 2, Paragraph 0021)**: a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the service control functions part **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and a content viewing request transmission unit for transmitting **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the media functions part **(the advertisement service interpreted as "the media functions part"; Page 2, Paragraph 0021)**, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**, when connection with the media functions part is established by **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**, and the media functions part comprises a content delivering unit for

receiving the main content viewing request transmitted by the user equipment and transmitting to the user equipment main content data identified by the main content identification information contained in the received main content viewing request **(the advertisement service receives a data request in the store (Fig. 1, element 13a) from the user device in accordance to the user's desired content transmitted by the authentication service, and at step 34 transmits the advertisement information to the user device 10; Page 2, Paragraphs 0021 - 0023)**, and for receiving the sub content viewing request transmitted by the user equipment and transmitting to the user equipment sub content data specified by the selected sub content specification information contained in the received sub content viewing request **(Fig. 3, step 30 shows that the advertisement service receives the data request from the user device, and at step 34 transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

However, the combination of AARTS and Masahito does not specifically disclose the core IMS part.

In an analogous art, Montpetit teaches the core IMS part **(the core network comprises an IP Multimedia Core Network Subsystem (IMS); Page 2, Paragraph 0018)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Montpetit to the modified system of AARTS and Masahito to provide an effective network services and application customization **(Montpetit: Page 1, Paragraph 0013)**.

Regarding claim 13, AARTS discloses wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the media functions part **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, and outputting **(at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

Regarding claim 14, AARTS teaches wherein the selected sub content specification information reception unit is configured to receive **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and the content viewing request transmission unit is configured to transmit **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** the main content viewing request and the sub content viewing request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing**

content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022) to the media functions part **(the advertisement service ; Page 2, Paragraph 0021)**.

However, AARTS does not specifically disclose the play-list information transmitted by the service control functions part; based on the received play-list information.

In an analogous art, Masahito teaches the play-list information transmitted by the service control functions part **(determining the playlist to perform processing such as replacing the CM, to play, and transmits it to the viewer terminal 5 (M409); Page 36, Paragraph 0134);** based on the received play-list information **(playlist generating unit 13b extracts the CM (Commercial Message) data included in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135 … extracts the CM data included in the contents from the advertisement frame memory unit 16 and delivers the play list generation unit 13b, (M407); Page 35, Paragraph 0131 … The video distribution server 13, extracts the advertisement frame associated to content ID with a distribution request from the advertisement frame memory unit 16, and checks whether the advertisement frame according to a user attribute is set up in the placement decision service in (S103); Page 36, Paragraph 0132)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Masahito with AARTS to

deliver user-friendly advertisements in accordance with the video content **(Masahito: Page 1, Paragraph 0001)**.

Regarding claim 26, the claim is interpreted and rejected for the same reason as set forth in claim 11.

Regarding claim 38, AARTS teaches a content delivery system **(a method of supplying advertising content; Page 1, Paragraph 0001)** comprising an application server system **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** and a connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)**, the connection control system for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information **(the authentication service interpreted as "the connection control system" is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021)**, the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)** comprising: a media functions part for transmitting content data representing content to the user equipment **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** with which connection is established **((Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish**

connection with the advertisement service; Page 2, Paragraph 0023); a service control functions part for controlling a service provided by the media functions part **(an advertisement server is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and a user profile server functions part for storing profile information of a user of the user equipment **(the user information store (Fig. 1, element 16a) comprise demographic information corresponding to the user; Page 1, Paragraph 0010)**, and the service control functions part comprising: a delivery request reception unit for receiving **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)** a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**, and an sub content selection unit for selecting the sub content data based on the equipment specification information or the main content identification information **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the

selected sub content data to the user equipment which has transmitted the content delivery request **Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, wherein the selected sub content specification information transmission unit is configured to transmit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, when the connection control system executes a process for establishing the connection **(the authentication service interpreted as "the connection control system" is configured to authenticate the user devices verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021)**, to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**.

However, AARTS does not specifically disclose a core IMS (Internet Protocol Multimedia Subsystem) part, via the core IMS part; play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

In an analogous art, Masahito teaches play-list information that is information containing the main content identification information contained in the content delivery

request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(Playlist generating unit 13b extracts the CM (Commercial Message) data included in the contents to be reproduced from the advertisement storage unit frame 16 from content ID with a distribution request based on the user profile information; Page 36, Paragraph 0135 … extracts the CM data included in the contents from the advertisement frame memory unit 16 and delivers the play list generation unit 13b, (M407); Page 35, Paragraph 0131 … The video distribution server 13, extracts the advertisement frame associated to content ID with a distribution request from the advertisement frame memory unit 16, and checks whether the advertisement frame according to a user attribute is set up in the placement decision service in (S103); Page 36, Paragraph 0132)**.

It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Masahito with AARTS to deliver user-friendly advertisements in accordance with the video content **(Masahito: Page 1, Paragraph 0001)**.

However, the combination of AARTS and Masahito does not specifically disclose comprising a core IMS (Internet Protocol Multimedia Subsystem) part, via the core IMS part.

In an analogous art, Montpetit teaches comprising a core IMS (Internet Protocol Multimedia Subsystem) part **(the core network comprises an IP Multimedia Core Network Subsystem (IMS); Page 2, Paragraph 0018)**, via the core IMS part **(the core network comprises an IMS; Page 2, Paragraph 0018)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Montpetit to the modified system of AARTS and Masahito to provide an effective network services and application customization **(Montpetit: Page 1, Paragraph 0013)**.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATALI N. PASCUAL PEGUERO whose telephone number is (571)272-4691. The examiner can normally be reached on Monday - Friday 7:30am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, UN C. CHO can be reached on (571)272-7919. 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 http://pair-direct.uspto.gov. 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.

/NATALI N PASCUAL PEGUERO/
Examiner, Art Unit 2413

/UN C. CHO/
Supervisory Patent Examiner, Art Unit 2413

Notice of References Cited	Application/Control No. 13/129,756	Applicant(s)/Patent Under Reexamination TANIGUCHI ET AL.	
	Examiner NATALI N. PASCUAL	Art Unit 2413	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2008/0256216 A1	10-2008	AARTS, Robert	709/217
*	B	US-2007/0223523 A1	09-2007	Montpetit et al.	370/465
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	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.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	39	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:30
L2	241	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:30
L3	50	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:30
L4	42659	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
L6	2	l1 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
L7	2	l2 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
L8	2	l3 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
L9	0	l4 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:31
L10	12	("20030105669" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 19:34
S1	1	"13129756"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 12:02
S2	2	"20110225270"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 12:22
S4	4	"2008022298"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 15:13

S6	1	"12099489"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 15:55
S7	4	"10287835"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 16:29
S8	2	"20030105669"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 16:30
S16	2639	((core near2 IMS) or (core near2 (Internet adj Protocol adj Multimedia adj Subsystem)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:56
S17	1275	@ad< "20081118" and S16	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:57
S18	67	S17 and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:57
S19	60	S18 and (user near2 (device or equipment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:58
S23	20	S19 and "370".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:01
S24	20	S16 and S23	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:02
S25	18	S19 and "709".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:07
S26	1	"13063122"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 21:21
S32	21	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:17
S33	173	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:18
S34	36	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:18
S36	10	("20030105669" | "20020033844" | "20070223523" |	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2013/05/01 23:24

		"20070088838" | "20080256216").PN.	IBM_TDB			
S37	40211	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:26
S38	21	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:28
S39	2	S38 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:28
S40	173	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S41	2	S40 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S42	36	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S43	2	S42 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S44	908	(Application near2 server) and (connection near2 control) and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:34
S45	502	@ad< "20081118" and S44	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:35
S46	235	S45 and ((user near2 (device or equipment)) and (storage) and (user near2 information))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:36
S47	19	S46 and 709/219,217.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
S48	5409367	(content delivery system).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
S49	2	S48 and S41	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
S50	702	S44 and (delivery)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:38

S51	44	S50 and 709/219,217.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:38
S52	37	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:40
S53	239	((KAZUO) near2 (ASAMI)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:41
S54	49	((KUNIHIRO) near2 (TANIGUCHI)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:41
S55	41734	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:42
S56	2	S52 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S57	2	S53 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S58	2	S54 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S59	0	S55 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
S60	12	("20030105669" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:28
S61	2	S60 and attribute	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:28
S62	74272	(H04L29/08072 H04L29/06 H04L29/0809 H04L29/08981 H04L29/08117).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38
S63	3124	S62 and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38
S64	844	S63 and attribute	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38
S65	1509	"I14" and delivery	US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	ON	2014/02/20 15:39

			JPO; DERWENT; IBM_TDB			
S66	14	S65 and (content near2 selection)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:39
S67	1	@ad< "20081118" and S66	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:40
S68	69263	@ad< "20081118" and S62	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:40
S69	159	S68 and (advertisement and (content near2 selection))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:41
S70	37	S69 and (application near2 server)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:41
S71	1	"13129756"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/05 13:41

EAST Search History (Interference)

< This search history is empty>

9/ 5/ 2014 7:35:48 PM
C:\ Users\ npascualpeguero\ Documents\ EAST\ Workspaces\ 13129756.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	Art Unit
	NATALI N PASCUAL PEGUERO	2413

CPC- SEARCHED		
Symbol	Date	Examiner
H04L 29/08072, H04L 29/06, H04L 29/0809, H04L 29/08981 and H04L29/08117	2/20/2014	NP

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
709	217,219		

SEARCH NOTES		
Search Notes	Date	Examiner
East Search including keywords,class/subclass,inventor,assignee	5/1/2013	NP
IP.com Patent Search	5/1/2013	NP
Updated Search in EAST	2/20/2014	NP
H04L 29/08072, H04L 29/06, H04L 29/0809, H04L 29/08981 and H04L29/08117 (Text Search only)	2/20/2014	NP
Updated Search in EAST	9/5/2014	NP

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

/NATALI N PASCUAL PEGUERO/ Examiner.Art Unit 2413	

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
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	Examiner	Art Unit
	NATALI N PASCUAL PEGUERO	2413

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

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/01/2013	02/20/2014	09/05/2014						
	1	✓	✓	✓						
	2	✓	✓	✓						
	3	✓	✓	✓						
	4	✓	✓	✓						
	5	✓	✓	✓						
	6	✓	✓	✓						
	7	✓	✓	-						
	8	✓	✓	✓						
	9	✓	✓	✓						
	10	✓	✓	✓						
	11	✓	✓	✓						
	12	✓	✓	✓						
	13	✓	✓	✓						
	14	✓	✓	✓						
	15	✓	✓	✓						
	16	✓	✓	✓						
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	21	✓	✓	✓						
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	24	✓	✓	✓						
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	28	✓	✓	✓						
	29		✓	✓						
	30		✓	✓						
	31		✓	✓						
	32		✓	✓						
	33		✓	✓						
	34		✓	✓						
	35		✓	✓						
	36		✓	✓						

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	Art Unit
	NATALI N PASCUAL PEGUERO	2413

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

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/01/2013	02/20/2014	09/05/2014						
	37			✓						
	38			✓						
	39			✓						
	40			✓						
	41			✓						

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	13129756	Filing Date	2011-05-17	Docket Number (if applicable)	2207946.00141US1	Art Unit	2413
First Named Inventor	Taniguchi KUNIHIRO			Examiner Name	N.P. Pascual		

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. The Instruction Sheet for this form is located at WWW.USPTO.GOV

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).

☐ 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.

- ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ☐ Other _____

☒ Enclosed

- ☒ Amendment/Reply
- ☐ Information Disclosure Statement (IDS)
- ☐ Affidavit(s)/ Declaration(s)
- ☐ Other _____

MISCELLANEOUS

☐ 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)

☐ Other _____

FEES

☒ **The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**
The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 08-0219

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

☐ Applicant Signature

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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Signature of Registered U.S. Patent Practitioner			
Signature	/Michael Smith/	Date (YYYY-MM-DD)	2014-06-03
Name	Michael H. Smith	Registration Number	71190

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.

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

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.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Kunihiro Taniguchi et al.	Confirmation No.:	1971
Application No.:	13/129,756	Art Unit:	2413
Filed:	May 17, 2011	Examiner:	N. P. Pascual
Title:	CONTENT DELIVERY SYSTEM		

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT IN RESPONSE TO FINAL OFFICE ACTION UNDER 37 C.F.R. 1.116

Dear Madam:

In response to the Office Action dated March 3, 2014, please amend the above-identified U.S. patent application as follows. Applicant concurrently files herewith a Request for Continued Examination (RCE).

Amendments to the Claims begin on page 2 of this paper.

Remarks/Arguments begin on page 30 of this paper.

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A content delivery system comprising an application server system and a connection control system,

the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information,

the application server system comprising:

a content storage unit for storing sub content data representing sub content and main content data representing main content;

a delivery request reception unit for receiving a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

a sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via

the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

2. (Previously Presented) The content delivery system according to claim 1, wherein:

the user equipment comprises:

a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the application server system; and

a content viewing request transmission unit for transmitting, to the application server system, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system, and

the application server system comprises a content delivering unit for receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by the main content identification information contained in the received main content viewing request to the user equipment, and for receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by the selected sub content

specification information contained in the received sub content viewing request to the user equipment.

3. (Previously Presented) The content delivery system according to claim 1, wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

4. (Currently amended) The content delivery system according to claim 1, wherein:

~~the selected sub content specification information transmission unit is configured to transmit, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output;~~

the selected sub content specification information reception unit is configured to receive the play-list information transmitted by the application server system; and

the content viewing request transmission unit is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the

received play-list information.

5. (Previously Presented) The content delivery system according to claim 1, wherein:

the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of sub content represented by the sub content data;

the selection information contains user basic information that is information for specifying the attribute information and is information associated with user identification information for identifying a user of the user equipment; and

the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the user basic information associated with the user identification information for identifying the user of the user equipment which has transmitted the content delivery request.

6. (Previously Presented) The content delivery system according to claim 1, wherein:

the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of the sub content represented by the sub content data;

the selection information contains content basic information that is information for specifying the attribute information and is information associated with the main content identification information for identifying the main content; and

the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the content basic information associated with the main content identification information contained in the received content delivery request.

7. (Canceled)

8. (Currently Amended) The content delivery system according to claim ~~7~~ 1, wherein

the connection control system is configured to establish the connection by exchanging a predetermined connection establishment message with each of the user equipment and the application server system; and

the selected sub content specification information transmission unit is configured to transmit the selected sub content specification information to the user equipment via the connection control system by incorporating the selected sub content specification information in the connection establishment message.

9. (Previously Presented) The content delivery system according to claim 1, wherein:

the application server system comprises a service control server and a media server; and

the service control server comprises the delivery request reception unit, the sub content selection unit, and the selected sub content specification information transmission unit.

10. (Previously Presented) The content delivery system according to claim 1, wherein:

The application server system comprises a service control server and a media server;

the service control server comprises the delivery request reception unit;

the media server comprises the content storage unit, the sub content selection unit, and the selected sub content specification information transmission unit;

the service control server further comprises an selection information transmission unit for transmitting the selection information to the media server via the connection control system;

the media server further comprises an selection information reception unit for receiving the selection information transmitted by the service control server; and

the sub content selection unit is configured to select the sub content data based on the received selection information.

11. (Currently Amended) A content delivery system comprising an application server system and a connection control system,

the connection control system comprising a core IMS (Internet Protocol Multimedia Subsystem) part for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a media functions part for transmitting content data representing content to the user equipment with which connection is established by the core IMS part;

a service control functions part for controlling a service provided by the media functions part; and

a user profile server functions part for storing profile information of a user of the user equipment,

the media functions part comprising a content storage unit for storing sub content data representing sub content and main content data representing main content,

the service control functions part comprising:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the core IMS part; and

an sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content and preliminarily stored by the user profile server functions part, the service control functions part or the connection control system; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data via the core IMS part to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content

delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

12. (Previously Presented) The content delivery system according to claim 11, wherein:

the user equipment comprises:

a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the service control functions part; and

a content viewing request transmission unit for transmitting, to the media functions part, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information, when connection with the media functions part is established by the core IMS part, and

the media functions part comprises a content delivering unit for receiving the main content viewing request transmitted by the user equipment and transmitting to the user equipment main content data identified by the main content identification information contained in the received main content viewing request, and for receiving the sub content viewing request transmitted by the user equipment and transmitting to the user equipment sub content data specified by the selected sub content specification information contained in the received sub content viewing request.

13. (Previously Presented) The content delivery system according to claim 11, wherein the user

equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the media functions part, and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

14. (Currently Amended) The content delivery system according to claim 11, wherein

~~the selected sub content specification information transmission unit is configured to transmit, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output;~~

the selected sub content specification information reception unit is configured to receive the play-list information transmitted by the service control functions part; and

the content viewing request transmission unit is configured to transmit the main content viewing request and the sub content viewing request to the media functions part, based on the received play-list information.

15. (Currently Amended) A content delivery method comprising:

receiving equipment specification information transmitted by user equipment and establishing connection between an application server system and the user equipment based on the received equipment specification information, by a connection control system;

receiving a content delivery request containing main content identification information for identifying main content and transmitted by the user equipment, by the application server system;

selecting sub content data stored in a storing device for storing sub content data representing sub content and main content data representing main content, based on selection information containing attribute information representing an attribute of sub content; ~~and~~

transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, by the application server system; and

transmitting, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output, by the application server system.

16. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the selected sub content specification information transmitted by the application server system, by the user equipment;

transmitting, to the application server system, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information, by the user equipment, when connection between the user equipment and the application server system is established by the connection control system; and

receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by main content identification information contained in the received main content viewing request to the user equipment, and receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by selected sub content specification information contained in the received sub content viewing request to the user equipment, by the application server system.

17. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the main content data and the sub content data transmitted by the application server system, and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data, by the user equipment.

18. (Currently amended) The content delivery method according to claim 15, comprising:

~~transmitting, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output, by the application server system;~~

receiving the play-list information transmitted by the application server system, by the user equipment; and

transmitting the main content viewing request and the sub content viewing request to the application server system based on the received play-list information, by the user equipment.

19. (Currently Amended) A service control server comprising:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via a connection control system establishing connection between a media server and the user equipment;

an sub content selection unit for selecting sub content data preliminarily stored in a storing device, based on selection information containing attribute information representing an attribute of sub content; and

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a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

20. (Canceled)

21. (Currently Amended) A user equipment comprising:

a selected sub content specification information reception unit for receiving selected sub content specification information selected based on selection information containing attribute information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application server system, via a connection control system establishing connection between the application server system and the user equipment, wherein the selected sub content specification information reception unit is configured to, when the connection

control system executes a process for establishing the connection, receive the play-list information transmitted by the application server system, via the connection control system to the user equipment which has transmitted the content delivery request, wherein the play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output; and

a content viewing request transmission unit for transmitting, to the application server system, a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system, wherein the content viewing request transmission unit is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information.

22. (Previously Presented) The user equipment according to claim 21, further comprising:

a content outputting unit for receiving main content data and sub content data transmitted by the application server system, and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

23. (Canceled)

24. (Previously Presented) The content delivery system according to claim 1, wherein the sub content is advertisement content.

25. (Currently Amended) A content delivery system comprising an application server system and a connection control system,

the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information,

the application server system comprising:

content storage means for storing sub content data representing sub content and main content data representing main content;

delivery request reception means for receiving, a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

sub content selection means for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content; and

selected sub content specification information transmission means for transmitting

selected sub content specification information for specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission means is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

26. (Currently Amended) A content delivery system comprising an application server system and a connection control system,

the connection control system comprising a core IMS (Internet Protocol Multimedia Subsystem) part for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a media functions part for transmitting content data representing content to the user equipment with which the connection is established by the core IMS part;

a service control functions part for controlling a service provided by the media

functions part; and

a user profile server functions part for storing profile information of a user of the user equipment,

the media functions part comprising content storage means for storing sub content data representing sub content and main content data representing main content,

the service control functions part comprising:

delivery request reception means for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the core IMS part; and

sub content selection means for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content and preliminarily stored by the user profile server functions part, the service control functions part or the connection control system; and

selected sub content specification information transmission means for transmitting selected sub content specification information for specifying the selected sub content data, via the core IMS part to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission means is configured to transmit, when the connection control system executes a process for establishing the connection, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information

containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

27. (Currently Amended) A service control server comprising:

delivery request reception means for receiving a content delivery request containing main content identification information for identifying main content and transmitted by user equipment, via a connection control system establishing connection between a media server and the user equipment;

sub content selection means for selecting sub content data preliminarily stored in a storing device based on selection information containing attribute information representing an attribute of sub content; and

selected sub content specification information transmission means for transmitting selected sub content specification information specifying the selected sub content data, via the connection control system to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission means is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by

the main content identification information and the sub content specified by the selected sub content specification information are output.

28. (Currently Amended) A user equipment comprising:

selected sub content specification information reception means for receiving selected sub content specification information selected based on selection information containing attribute information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application server system, via a connection control system establishing connection between the application server system and the user equipment, wherein the selected sub content specification information reception means is configured to, when the connection control system executes a process for establishing the connection, receive the play-list information transmitted by the application server system, via the connection control system to the user equipment which has transmitted the content delivery request, wherein the play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output; and

content viewing request transmission means for transmitting, to the application server system, a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub

content specification information, when connection with the application server system is established by the connection control system, wherein the content viewing request transmission means is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information.

29. (Currently Amended) A server configured to perform operations comprising:

storing a plurality of sub content data and a plurality of main content data, wherein each of the plurality of sub content data is associated with one or more sub content attributes;

receiving a content delivery request from a user device, wherein the content delivery request identifies first main content data of the plurality of main content data;

selecting at least first sub content data and second sub content data from the plurality of sub content data based on the first sub content data and the second sub content data being associated with at least a particular attribute of the sub content attributes; ~~and~~

transmitting a first choice option corresponding to the first sub content data and a second choice option corresponding to the second sub content data to the user device; and

transmitting play-list information to the user device via a connection established by a connection control system, wherein the play-list information identifies the main content, the first sub content data, the second sub content data, and a sequence in which the main content, the first sub content data, the second sub content data are to be output.

30. (Previously Presented) The server according to claim 29, wherein the server is further

configured to perform operations comprising:

receiving a sub content viewing request from the user device, wherein the sub content viewing request contains a selected choice corresponding to either the first choice option or the second choice option;

transmitting the first sub content data to the user device as selected sub content data if the selected choice corresponds to the first choice option;

transmitting the second sub content data to the user device as the selected sub content data if the selected choice corresponds to the second choice option; and

transmitting the first main content data identified by the content delivery request to the user device.

31. (Previously Presented) The server according to claim 30, wherein a user inputs a selection command to the user device to select the first choice option or the second choice option as the selected choice.

32. (Previously Presented) The server according to claim 30, wherein the server is further configured to perform operations comprising:

transmitting the first main content data and the selected sub content data to the user device for viewing on the user device.

33. (Previously Presented) The server according to claim 29, wherein the content delivery request

from the user device contains user information about a user of the user device, and

wherein the server is further configured to perform operations comprising selecting the first sub content data and the second sub content data when the particular attribute corresponds to the user information.

34. (Previously Presented) The server according to claim 30, wherein the content delivery request from the user device contains user information about a user of the user device, and

wherein the server is further configured to perform operations comprising selecting the first sub content data and the second sub content data when the particular attribute corresponds to the user information.

35. (Previously Presented) The server according to claim 29, wherein the server is further configured to perform operations comprising:

associating each of the plurality of main content data with one or more main content attributes;

selecting the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content.

36. (Previously Presented) The server according to claim 30, wherein the server is further configured to perform operations comprising:

associating each of the plurality of main content data with one or more main content

attributes;

selecting the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content.

37. (New) A content delivery system comprising an application server system and a connection control system,

the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information,

the application server system comprising:

a delivery request reception unit for receiving a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

a sub content selection unit for selecting the sub content data based on the equipment specification information or the main content identification information; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request,

wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery

request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

38. (New) A content delivery system comprising an application server system and a connection control system,

the connection control system comprising a core IMS (Internet Protocol Multimedia Subsystem) part for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a media functions part for transmitting content data representing content to the user equipment with which connection is established by the core IMS part;

a service control functions part for controlling a service provided by the media functions part; and

a user profile server functions part for storing profile information of a user of the user equipment, and

the service control functions part comprising:

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a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the core IMS part; and

an sub content selection unit for selecting the sub content data based on the equipment specification information or the main content identification information; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data via the core IMS part to the user equipment which has transmitted the content delivery request, wherein the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

39. (New) A content delivery method comprising:

receiving equipment specification information transmitted by user equipment and establishing connection between an application server system and the user equipment based on the received equipment specification information, by a connection control system;

receiving a content delivery request containing main content identification information for identifying main content and transmitted by the user equipment, by the application server system;

selecting sub content data representing sub content based on the equipment specification information or the main content identification information;

transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, by the application server system; and

transmitting, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output, by the application server system.

40. (New) A non-transitory computer program comprising instructions for causing a service control server to realize:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment

via a connection control system establishing connection between a media server and the user equipment;

an sub content selection unit for selecting content data based on the main content identification information; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, and

the selected sub content specification information transmission unit for transmitting, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

41. (New) A service control server comprising:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via a connection control system establishing connection between a media server and the user equipment;

an sub content selection unit for selecting sub content data based on the main content identification information; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, and

the selected sub content specification information transmission unit is configured to transmit, when the connection control system executes a process for establishing the connection, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

REMARKS

Claims 1-36 have been examined. Claims 1, 5-9, 11, 14, 19-21 and 24-26 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting, claims 1-3, 5-10, 15-17, 19, 21, 22, 24, 25, and 27-36 were rejected under 35 U.S.C. § 102(e), and claims 4, 11-13, 14, 18, 20, 23, 26 were rejected under 35 U.S.C. § 103(a).[1]

At the outset, Applicants respectfully submit that the amendments presented in this response should not be construed as an admission that the claims as previously presented are not patentable, or that the cited references anticipate or render obvious the claims as previously presented. Indeed, Applicants respectfully submit that the claims as previously presented, and/or further amendments thereto, also contain patentable subject material. Thus, Applicants reserve the right to pursue the claims as previously presented, and/or further amendments thereto, in one or more continuation applications.

I. Double Patenting Rejection

Claims 1, 5-9, 11, 14, 19-21 and 24-26 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 6-8, 11, 13 and 19-24 of copending U.S. Application No. 13/063122. Since neither the present application nor

[1] As Applicants' remarks with respect to the Examiner's rejections are sufficient to overcome these rejections, Applicants' silence as to assertions made by the Examiner in the Office Action or certain requirements that may be applicable to such rejections (e.g., assertions regarding dependent claims, whether a reference constitutes prior art, whether references are legally combinable for obviousness purposes) is not a concession by Applicants that such assertions are accurate or such requirements have been met, and Applicants reserve the right to analyze and dispute such in the future.

U.S. Application No. 13/063122 has issued into a patent, Applicant respectfully submits that the rejection is premature and respectfully requests that this rejection be held in abeyance until the copending application issues or until the Examiner concludes that the present application contains allowable subject matter.

II. Rejection under 35 U.S.C. § 102(e) over U.S. Patent Application Publication No. 2008/0256216 to AARTS ("AARTS")

Claims 1-3, 5-10, 15-17, 19, 21, 22, 24, 25, and 27-36 were rejected under 35 U.S.C. § 102(e) as being anticipated by AARTS.

A. Claim 1

Applicant submits that AARTS does not disclose all of the features of claim 1. For example, claim 1 states a selected sub content specification information transmission unit is configured to transmit, when a connection control system executes a process for establishing a connection, via the connection control system to a user equipment which has transmitted a content delivery request, play-list information which is information containing a main content identification information contained in a content delivery request and a selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output. AARTS fails to disclose or even suggest this limitation. For example, the Office Action states:

> AARTS does not specifically disclose play-list information which is information containing the main content identification information contained in the content

> delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output; the play-list, based on the received play-list information.

Office Action at 25.

Moreover, AARTS fails to disclose or even suggest a selected sub content specification information transmission unit is configured to transmit, when a connection control system executes a process for establishing a connection, via the connection control system to a user equipment which has transmitted a content delivery request, the claimed play-list information. By contrast, in AARTS, the advertisement service 13 transmits an authentication request 17 to the authentication server 16 (alleged "connection control system") at step 31 and receives an authentication response from the authentication service 16 (alleged "connection control system") at step 32, and an advertisement service generates advertisement information at step 33 and transmits it to the user device 10 at step 34. AARTS at paragraph [0023]. AARTS fails to disclose or even suggest that a selected sub content specification information transmission unit is configured to transmit *via a connection control system* to a user equipment play-list information, much less that a selected sub content specification information transmission unit is configured to transmit, when a connection control system executes a process for establishing a connection, via the connection control system to a user equipment which has transmitted a content delivery request, the claimed play-list information, as claimed.

Accordingly, Applicant submits that claim 1 is patentable for at least the reasons presented above.

B. Claims 2, 3, 5-10

Since claims 2, 3 and 5-10 depend on claim 1, they are patentable at least based on their dependency.

C. Claim 7

Claim 7 has been canceled without prejudice or disclaimer. Accordingly, Applicant requests the rejection of claim 7 be withdrawn.

D. Claims 15, 19, 21, 25, 27, 28, and 29

Claims 15, 19, 21, 25, 27, 28 and 29 contain features that are similar or analogous to those discussed in conjunction with claim 1. Therefore, Applicant submits that these claims are patentable over AARTS for at least similar reasons.

E. Claims 16, 17, 22, 24, and 30-36

Since claims 16, 17, 22, 24, and 30-36 depend on claims 1, 15, 21, and 29, they are patentable at least based on their dependency.

III. Rejection under 35 USC § 103(a) over AARTS in view of U.S. Patent Application Publication No. 2003/0105669 to Tsuchiya ("Tsuchiya")

Claims 4, 18, 20 and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over AARTS in view of Tsuchiya.

A. Claim 4 and 18

Since claims 4 and 18 depend on claims 1 and 15, and since the Tsuchiya does not cure the deficient teachings of AARTS with respect to claims 1 and 15, claims 4 and 18 are patentable over AARTS in view of Tsuchiya at least based on their dependency.

For example, as discussed above, claim 1 states that a selected sub content specification information transmission unit is configured to transmit, when a connection control system executes a process for establishing a connection, via the connection control system to a user equipment which has transmitted a content delivery request, play-list information which is information containing a main content identification information contained in a content delivery request and a selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output. By contrast, paragraph [0147] of Tsuchiya merely states that advertisement information transmitted together with the contents may previously be collected in a single file or may be provided as an individual file, and may be transmitted by properly combining the files. Tsuchiya fails to disclose or even suggest play-list information which is information containing information indicating *a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output*, much less a selected sub content specification information transmission unit is configured to transmit, when a connection control system executes a process for establishing a connection, via the connection control system to a user equipment which has transmitted a content delivery request, play-list information which is

information containing a main content identification information contained in a content delivery request and a selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output, as claimed.

B. Claims 20 and 23

Claims 20 and 23 have been canceled without prejudice or disclaimer. Accordingly, Applicant requests the rejection of claims 20 and 23 be withdrawn.

IV. Rejection under 35 USC § 103(a) over AARTS in view of U.S. Patent Application Publication No. 2007/0223523 to Montpetit et al. ("Montpetit")

Claims 11-13, and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over AARTS in view of Montpetit.

A. Claims 11 and 26

Claims 11 and 26 contain features that are similar or analogous to those discussed in conjunction with claim 1, and since Montpetit does not cure the deficient teachings of AARTS with respect to claim 1, Applicant submits that claims 11 and 26 are patentable for at least similar reasons.

B. Claims 12-13

Since claims 12-13 depend upon claim 11, and since the Montpetit does not cure the deficient teachings of AARTS with respect to claim 11, claims 12-13 are patentable over AARTS in view of Montpetit at least based on their dependency.

V. Rejection under 35 USC § 103(a) over AARTS in view of Montpetit and Tsuchiya

Claim 14 was rejected under 35 U.S.C. § 103(a) as being unpatentable over AARTS in view of Montpetit and Tsuchiya. Since claim 14 depends upon claim 11, and since Montpetit and Tsuchiya do not cure the deficient teachings of AARTS with respect to claim 11, claim 14 is patentable at least based on its dependency.

VI. New Claims

Applicant has added new claims 37-41. Claims 37-41 contain features that are similar or analogous to those discussed in conjunction with claim 1. Therefore, Applicant submits that these claims are patentable for at least similar reasons.

VII. Conclusion

Applicant believes the pending application is in condition for allowance. Applicant believes no other fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-0219, under Order No. 2207946.00141US1, from which the undersigned is authorized to draw.

Respectfully submitted,

Dated: June 3, 2014

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Electronic Patent Application Fee Transmittal

Application Number:	13129756
Filing Date:	17-May-2011
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Filer:	Michael Hal Smith/Ondine Marquer
Attorney Docket Number:	J-11-0248

Filed as Large Entity

U.S. National Stage under 35 USC 371 Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Claims in excess of 20	1615	2	80	160
Independent claims in excess of 3	1614	5	420	2100
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
Request for Continued Examination	1801	1	1200	1200
		Total in USD ($)		**3460**

Electronic Acknowledgement Receipt

EFS ID:	19199479
Application Number:	13129756
International Application Number:	
Confirmation Number:	1971
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Customer Number:	71799
Filer:	Michael Hal Smith/Ondine Marquer
Filer Authorized By:	Michael Hal Smith
Attorney Docket Number:	J-11-0248
Receipt Date:	03-JUN-2014
Filing Date:	17-MAY-2011
Time Stamp:	18:26:00
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$3460
RAM confirmation Number	5228
Deposit Account	080219
Authorized User	SMITH, MICHAEL H.

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

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Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees) Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees) Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	NEC_141US1_Request_for_Continued_Examination_Fillable.PDF	697729 96be40a9ddb8fe66298cd92b79105d1268f97a14	no	3
Warnings:					
Information:					
2		NEC141US1_Response_to_OA.PDF	291472 78fed8d24d84f582ef66833ef69f000107b9a78a	yes	37

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment Submitted/Entered with Filing of CPA/RCE	1	1
	Claims	2	29
	Applicant Arguments/Remarks Made in an Amendment	30	37

Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	33487 18667365686ef0cc0e41666d024eca1d4c4ba06d	no	2
Warnings:					
Information:					
			Total Files Size (in bytes):	1022688	

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

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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.

PTO/SB/06 (09-11)
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/129,756	Filing Date 05/17/2011	☐ To be Mailed

ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) 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), (i), 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 $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ 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

AMENDMENT **06/03/2014**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 38	Minus	** 36	= 2	X $80 =	160
Independent (37 CFR 1.16(h))	* 15	Minus	***10	= 5	X $420 =	2100
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	**2260**

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
☐ 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.
** 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 number found in the appropriate box in column 1.

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/BRENDA J. DENNY/

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Mr. Ryoichi Harada
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Courtesy Reminder for
Application Serial No: 13/129,756

Attorney Docket No: J-11-0248
Customer Number: 71799
Date of Electronic Notification: 03/03/2014

This is a courtesy reminder that new correspondence is available for this application. If you have not done so already, please review the correspondence. The official date of notification of the outgoing correspondence will be indicated on the form PTOL-90 accompanying the correspondence.

An email notification regarding the correspondence was sent to the following email address(es) associated with your customer number:

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EXAMINER	
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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):

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Office Action Summary	Application No. 13/129,756	Applicant(s) TANIGUCHI ET AL.	
	Examiner NATALI N. PASCUAL PEGUERO	Art Unit 2413	AIA (First Inventor to File) 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 *15 November 2013*.

☐ 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) *1-36* 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) *1-36* 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 _____ 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 *12/17/2013*.

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

4) ☐ Other: _____.

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

DETAILED ACTION

Response to Arguments

2. Applicant's arguments filed 11/15/2013 have been fully considered but they are not persuasive.

With respect to claim 1:

The applicant presented arguments on page 24 that the references fail to show certain features of applicant's invention, for example, "a sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content".

The examiner respectfully disagrees with the arguments presented by the applicant. AARTS teaches a sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**.

It has been shown that AARTS clearly teaches all the limitations of claim 1, and therefore the rejections are deemed proper.

With respect to claim 5:

The applicant presented arguments on page 25 that the references fail to show certain features of applicant's invention, for example, "the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of sub content represented by the sub content data; the selection information contains user basic information that is information for specifying the attribute information and is information associated with user identification information for identifying a user of the user equipment; and the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the user basic information associated with the user identification information for identifying the user of the user equipment which has transmitted the content delivery request".

The examiner respectfully disagrees with the arguments presented by the applicant. AARTS teaches the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of sub content represented by the sub content data **(the content service (Fig. 1, element 11) interpreted as "the content storage unit" is configured to store the content information comprising content data to be used in providing an output to the user, and metadata interpreted to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; the selection information contains user

basic information that is information for specifying the attribute information and is information associated with user identification information for identifying a user of the user equipment **(in the system of Fig. 5, the user device receives content data and metadata, but in this example the metadata comprises a pointer to authentications service, and the fig. 4, step 41 shows that the authentication service identifies the user device from the information transmitted; Page 2, Paragraph 0024 and 0029)**; and the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the user basic information **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)** associated with the user identification information for identifying the user **(at step 33, the advertisement service generates advertisement information in accordance with the received authentication information used for identifying the user device; Page 2, Paragraph 0023)** of the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**.

It has been shown that AARTS clearly teaches all the limitations of claim 1, and therefore the rejections are deemed proper.

With respect to claims 2, 3, 4, and 6 -10:

The applicant's arguments have been fully considered but they are not persuasive. The teachings in the references clearly address the limitations in claim 1, and therefore the rejections with respect to claims 2, 3, 4, and 6 -10 are maintained.

With respect to claims 15, 19, 21, 25, 27 and 28:

The applicant's arguments have been fully considered but they are not persuasive. The teachings in the references clearly address the limitations in claim 1, and therefore the rejections with respect to claims 15, 19, 21, 25, 27 and 28 are maintained.

With respect to claims 16, 17, 22 and 24:

The applicant's arguments have been fully considered but they are not persuasive. The teachings in the references clearly address the limitations in claim 1, 15 and 21, therefore the rejections with respect to claims 16, 17, 22 and 24 are maintained.

With respect to claims 4, 18, 20 and 23:

The applicant's arguments have been fully considered but they are not persuasive. The teachings in the references clearly address the limitations in claim 1, 15, 19 and 21, therefore the rejections with respect to claims 4, 18, 20 and 23 are maintained.

With respect to claims 11 and 26:

The applicant's arguments have been fully considered but they are not persuasive. The teachings in the references clearly address the limitations in claim 1, and therefore the rejections with respect to claims 11 and 26 are maintained.

With respect to claims 12, 13 and 14:

The applicant's arguments have been fully considered but they are not persuasive. The teachings in the references clearly address the limitations in claim 1, and therefore the rejections with respect to claims 12, 13 and 14 are maintained.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on December 17, 2013 has been placed in record and considered by the examiner.

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 obviousness-type 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); and *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 a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims **1, 5 - 9, 11, 14, 19 - 21 and 24-26** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims **1 - 3, 6 - 8, 11, 13 and 19 - 24** of copending Application **No. 13/063122**. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed limitations are similar in scope with broader recitation. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 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 –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 - 3, 5 - 10, 15 - 17, 19, 21 – 22, 24 - 25, and 27 - 36 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by AARTS (Pub # US 2008/0256216 A1).

Regarding claim 1, AARTS discloses a content delivery system **(a method of supplying advertising content; Page 1, Paragraph 0001)** comprising an application server system **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)** and a connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)**, the connection control system being configured to receive equipment specification information transmitted by user equipment and

establish connection between the application server system and this user equipment based on the received equipment specification information **(the authentication service interpreted as "the connection control system" is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021)**, the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)** comprising: a content storage unit for storing sub content data representing sub content and main content data representing main content **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), and may also track advertisement data sent to a particular user or device; Page 2, Paragraph 0021)**; a delivery request reception unit for receiving **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)** a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**; a sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's**

recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013); and a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** via the connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**.

Regarding claim 2, AARTS discloses wherein: the user equipment comprises **(the user device interpreted as "user equipment"; Page 2, Paragraph 0021)**: a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the application server system **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and a content viewing request transmission unit for transmitting **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the application server system **(the advertisement service interpreted as "the**

application service system"; Page 2, Paragraph 0021), a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**, and the application server system comprises a content delivering unit for receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by the main content identification information contained in the received main content viewing request to the user equipment **(the advertisement service receives a data request in the store (Fig. 1, element 13a) from the user device in accordance to the user's desired content transmitted by the authentication service, and at step 34 transmits the advertisement information to the user device 10; Page 2, Paragraphs 0021 - 0023)**, and for receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by the selected sub content specification information contained in the received sub content viewing request to the user equipment **(Fig. 3, step 30 shows that the advertisement service receives the data request from the user device, and at step 34 transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding claim 3, AARTS discloses wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

Regarding claim 5, AARTS discloses wherein: the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of sub content represented by the sub content data **(the content service (Fig. 1, element 11) interpreted as "the content storage unit" is configured to store the content information comprising content data to be used in providing an output to the user, and metadata interpreted as to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; the selection information contains user basic information that is information for specifying the attribute information and is information associated with user identification

information for identifying a user of the user equipment **(in the system of Fig. 5, the user device receives content data and metadata, but in this example the metadata comprises a pointer to authentications service, and the fig. 4, step 41 shows that the authentication service identifies the user device from the information transmitted; Page 2, Paragraph 0024 and 0029)**; and the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the user basic information **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)** associated with the user identification information for identifying the user **(at step 33, the advertisement service generates advertisement information in accordance with the received authentication information used for identifying the user device; Page 2, Paragraph 0023)** of the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**.

Regarding claim 6, AARTS discloses wherein: the content storage unit is configured to store the sub content data in association with attribute information

representing an attribute of the sub content represented by the sub content data **(the content service (Fig. 1, element 11) interpreted as "the content storage unit" is configured to store the content information comprising content data to be used in providing an output to the user, and metadata to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; the selection information contains content basic information that is information for specifying the attribute information and is information associated with the main content identification information for identifying the main content **(the content information comprising content data to be used in providing an output to the user, and metadata to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; and the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the content basic information associated with the main content identification information **(the authentication service transmits general information thus allowing an advertisement to be personalized to the user, such as age, gender, geographic information or any other information as appropriate. At step 33, the advertisement service generates advertisement information in accordance with the received authentication information; Page 2, Paragraph 0023)** contained in the received content delivery request **(Fig. 3, step 30 shows that the advertisement service receives the data request from the user device; Page 2, Paragraph 0023)**.

Regarding claim 7, AARTS discloses wherein the selected sub content specification information transmission unit is configured to transmit the selected sub

content specification information to the user equipment via the connection control system when the connection control system executes a process for establishing the connection **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service, and at step 34 the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding claim 8, AARTS discloses wherein the connection control system is configured to establish the connection by exchanging a predetermined connection establishment message with each of the user equipment and the application server system **(the authentication service interpreted as "the connection control system" is configured to authenticate the user devices verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021)**; and the selected sub content specification information transmission unit is configured to transmit the selected sub content specification information to the user equipment **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)** via the connection control system **(the authentication service interpreted as "the connection control system"; Page 2, Paragraph 0021)** by incorporating the selected sub content specification information in the connection establishment message **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received**

authentication information used for establishing connection with the user device; Page 2, Paragraph 0023).

Regarding claim 9, AARTS discloses wherein: the application server system comprises a service control server and a media server **(an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and the service control server comprises the delivery request reception unit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, the sub content selection unit **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**, and the selected sub content specification information transmission unit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding claim 10, AARTS discloses wherein: The application server system comprises a service control server and a media server **(an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; the service control server comprises the delivery request reception unit **(the advertisement device is operable**

to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021); the media server comprises the content storage unit **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), the sub content selection unit (Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**, and the selected sub content specification information transmission unit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**; the service control server further comprises an selection information transmission unit for transmitting the selection information to the media server **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information; Page 2, Paragraph 0023)** via the connection control system **(the authentication service interpreted as "the connection control system"; Page 2, Paragraph 0021)**; the media server further comprises an selection information reception unit for receiving the selection information transmitted by the service control server **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and the sub content selection unit is configured to select the sub content data based on the received selection information **(the advertisement service generates advertisement information interpreted as "the**

sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023).

Regarding claim 15, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding claim 16, the claim is interpreted and rejected for the same reason as set forth in claim 2.

Regarding claim 17, the claim is interpreted and rejected for the same reason as set forth in claim 3.

Regarding claim 19, AARTS discloses a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content **(the advertisement device is operable to receive a data request (Fig. 1, element 14) from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)** and transmitted by a user equipment **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** via a connection control system establishing connection between a media server and the user equipment **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; an sub content selection unit for selecting sub content data preliminarily stored in a storing device **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content**

transmitted by the authentication service; Page 2, Paragraph 0023), based on selection information containing attribute information representing an attribute of sub content **(the content information comprising content data to be used in providing an output to the user, and metadata to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected content data via the connection control system to the user equipment which has transmitted the content delivery request **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding claim 21, AARTS discloses a user equipment comprising **(the user device interpreted as "user equipment"; Page 2, Paragraph 0021)**: a selected sub content specification information reception unit for receiving selected sub content specification information **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)** selected based on selection information containing attribute information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application server system **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 …**

an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013), via a connection control system establishing connection between the application server system and the user equipment **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; and a content viewing request transmission unit for transmitting **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**, a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**.

Regarding claim 22, the claim is interpreted and rejected for the same reason as set forth in claim 3.

Regarding claim 24, AARTS discloses wherein the sub content is advertisement content (advertisement information; Page 1, Paragraph 0005).

Regarding claim 25, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding claim 27, the claim is interpreted and rejected for the same reason as set forth in claim 19.

Regarding claim 28, the claim is interpreted and rejected for the same reason as set forth in claim 21.

Regarding claim 29, a server configured to perform operations comprising: storing a plurality of sub content data and a plurality of main content data **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), and may also track advertisement data sent to a particular user or device; Page 2, Paragraph 0021)**, wherein each of the plurality of sub content data is associated with one or more sub content attributes **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)** ; receiving a content delivery request from a user device **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)**, wherein the content delivery request identifies first main content data of the plurality of main content

data **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**; selecting at least first sub content data and second sub content data from the plurality of sub content data based on the first sub content data and the second sub content data being associated with at least a particular attribute of the sub content attributes **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**; and transmitting a first choice option corresponding to the first sub content data and a second choice option corresponding to the second sub content data to the user device **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding claim 30, wherein the server is further configured to perform operations comprising: receiving a sub content viewing request from the user device, wherein the sub content viewing request contains a selected choice corresponding to either the first choice option or the second choice option **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**; transmitting the first sub content data to the user device as selected sub content data if the selected

choice corresponds to the first choice option; transmitting the second sub content data to the user device as the selected sub content data if the selected choice corresponds to the second choice option **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**; and transmitting the first main content data identified by the content delivery request to the user device **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding claim 31, wherein a user inputs a selection command to the user device to select the first choice option or the second choice option as the selected choice **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**.

Regarding claim 32, wherein the server is further configured to perform operations comprising: transmitting the first main content data and the selected sub content data to the user device for viewing on the user device **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

Regarding claim 33, wherein the content delivery request from the user device contains user information about a user of the user device **(the user information store (Fig. 1, element 16a) comprise demographic information corresponding to the user; Page 1, Paragraph 0010)**, and wherein the server is further configured to perform operations comprising selecting the first sub content data and the second sub content data when the particular attribute corresponds to the user information **(an advertisement server (Fig. 1, element 13) interpreted as "the application server system" is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**.

Regarding claim 34, the claim is interpreted and rejected for the same reason as set forth in claim 33.

Regarding claim 35, wherein the server is further configured to perform operations comprising: associating each of the plurality of main content data with one or more main content attributes **(the user profile information may simply categorize the user in accordance with demographic terms, such as age, gender or geographical location, or may be a more detailed profile based on the user's recorded browsing habits, purchasing patterns or indeed on information voluntarily submitted by a user; Page 1, Paragraph 0002 … Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**;

selecting the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)**.

Regarding claim 36, the claim is interpreted and rejected for the same reason as set forth in claim 35.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 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 of this title, 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 negatived by the manner in which the invention was made.

8. Claims 4, 18, 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over AARTS in view of Tsuchiya. (Pub # US 2003/0105669 A1).

Regarding claim 4, AARTS teaches wherein: the selected sub content specification information transmission unit is configured to transmit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, via the connection control system **(an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)** to the user equipment which has transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page**

2, Paragraph 0022); the selected sub content specification information reception unit is configured to receive information transmitted by the application server system **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and the content viewing request transmission unit is configured to transmit **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** the main content viewing request and the sub content viewing request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)** to the application server system **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**.

However, AARTS does not specifically disclose play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output; the play-list, based on the received play-list information.

In an analogous art, Tsuchiya teaches play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(the contents**

distribution processing unit (Fig. 11, element 1102) has a function for receiving information for specifying the contents selected by the member device 604, this information includes various prepared contents interpreted as "play-list information" and advertisement information; Page 7, Paragraphs 0145 - 0147), and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(the contents distribution processing unit (Fig. 11, element 1102) receives a URL (Uniform Resource Locator) indicating the position for storing a file of the contents, then, reading the file from the contents data recording unit (Fig. 11, element 1103), and transmitting an output of the file to the member device (Fig. 6, element 604); Page 7, Paragraph 0145)**; the play-list **(various prepared contents interpreted as "play-list information"; Page 7, Paragraph 0147)**, based on the received play-list information **(various prepared contents interpreted as "play-list information"; Page 7, Paragraph 0147)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Tsuchiya with AARTS to improve the quality of the user's estimation information by appraising the estimation information of one user by another user **(Tsuchiya: Page 1, Paragraph 0017)**.

Regarding claim 18, the claim is interpreted and rejected for the same reason as set forth in claim 4.

Regarding claim 20, the claim is interpreted and rejected for the same reason as set forth in claim 4.

Regarding claim 23, the claim is interpreted and rejected for the same reason as set forth in claim 4.

9. Claims 11 - 13, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over AARTS in view of Montpetit et al. (Pub # US 2007/0223523 A1 hereinafter Montpetit).

Regarding claim 11, AARTS teaches a content delivery system **(a method of supplying advertising content; Page 1, Paragraph 0001)** comprising an application server system **(an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021) and a connection control system (an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021)**, the connection control system for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information **(the authentication service interpreted as "the connection control system" is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021)**, the application server system comprising **(the advertisement service interpreted as "the application service system"; Page 2, Paragraph 0021)**: a media functions part for transmitting content data representing content to the user equipment **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement**

information to the user device; Page 2, Paragraph 0023) with which the connection is established **((Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023)**; a service control functions part for controlling a service provided by the media functions part **(an advertisement server is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013)**; and a user profile server functions part for storing profile information of a user of the user equipment **(the user information store (Fig. 1, element 16a) comprise demographic information corresponding to the user; Page 1, Paragraph 0010)**, the media functions part comprising a content storage unit for storing sub content data representing sub content and main content data representing main content **(the advertisement service stores advertisement information in store (Fig. 1, element 13a), and may also track advertisement data sent to a particular user or device; Page 2, Paragraph 0021)**, the service control functions part comprising: a delivery request reception unit for receiving **(the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021)** a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment content **(the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022)**; and an sub content selection unit for selecting the

stored sub content data based on selection information containing attribute information representing an attribute of the sub content **(Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023)** and preliminarily stored by the user profile server functions part **(Fig. 2, step 21 shows that the user device receives data including content information from the content service; Page 2, Paragraph 0022)**, the service control functions part or the connection control system **(the authentication service interpreted as "the connection control system"; Page 2, Paragraph 0021)**; and a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data to the user equipment which has transmitted the content delivery request **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose comprising a core IMS (Internet Protocol Multimedia Subsystem) part, via the core IMS part.

In an analogous art, Montpetit teaches comprising a core IMS (Internet Protocol Multimedia Subsystem) part **(the core network comprises an IP Multimedia Core Network Subsystem (IMS); Page 2, Paragraph 0018)**, via the core IMS part **(the core network comprises an IMS; Page 2, Paragraph 0018)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Montpetit with AARTS to provide network services and application customization **(Montpetit: Page 1, Paragraph 0013)**.

Regarding claim 12, AARTS teaches wherein: the user equipment comprises **(the user device interpreted as "user equipment"; Page 2, Paragraph 0021)**: a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the service control functions part **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and a content viewing request transmission unit for transmitting **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**, to the media functions part **(the advertisement service interpreted as "the media functions part"; Page 2, Paragraph 0021)**, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)**, when connection with the media functions part is established by **(Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement**

service; Page 2, Paragraph 0023), and the media functions part comprises a content delivering unit for receiving the main content viewing request transmitted by the user equipment and transmitting to the user equipment main content data identified by the main content identification information contained in the received main content viewing request **(the advertisement service receives a data request in the store (Fig. 1, element 13a) from the user device in accordance to the user's desired content transmitted by the authentication service, and at step 34 transmits the advertisement information to the user device 10; Page 2, Paragraphs 0021 - 0023)**, and for receiving the sub content viewing request transmitted by the user equipment and transmitting to the user equipment sub content data specified by the selected sub content specification information contained in the received sub content viewing request **(Fig. 3, step 30 shows that the advertisement service receives the data request from the user device, and at step 34 transmits the advertisement information to the user device; Page 2, Paragraph 0023)**.

However, AARTS does not specifically disclose the core IMS part.

In an analogous art, Montpetit teaches the core IMS part **(the core network comprises an IP Multimedia Core Network Subsystem (IMS); Page 2, Paragraph 0018)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Montpetit with AARTS to provide network services and application customization **(Montpetit: Page 1, Paragraph 0013)**.

Regarding claim 13, AARTS discloses wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the media functions part **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022)**, and outputting **(at step 24 generates an output; Page 2, Paragraph 0022)**, based on the received main content data and sub content data **(in accordance with the newly received content information interpreted as "the main content data" and advertisement information interpreted as "the sub content data"; Page 2, Paragraph 0022)**, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data **(the advertisement service generates advertisement information interpreted as "the sub content" in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023)**.

Regarding claim 26, the claim is interpreted and rejected for the same reason as set forth in claim 11.

10. Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over AARTS in view of Montpetit, and further in view of Tsuchiya.

Regarding claim 14, AARTS teaches wherein the selected sub content specification information transmission unit is configured to transmit **(Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023)**, to the user equipment which has

transmitted the content delivery request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)**; the selected sub content specification information reception unit is configured to receive information transmitted by the service control functions part **(Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022)**; and the content viewing request transmission unit is configured to transmit **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022)** the main content viewing request and the sub content viewing request **(Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022)** to the media functions part **(the advertisement service ; Page 2, Paragraph 0021)**.

However, AARTS does not specifically disclose via the core IMS part.

In an analogous art, Montpetit teaches via the core IMS part **(the core network comprises an IMS; Page 2, Paragraph 0018)**.

It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Montpetit with AARTS to provide network services and application customization **(Montpetit: Page 1, Paragraph 0013)**.

However, the combination of AARTS and Montpetit does not specifically disclose play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content

specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output; the play-list, based on the received play-list information.

In an analogous art, Tsuchiya teaches play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information **(the contents distribution processing unit (Fig. 11, element 1102) has a function for receiving information for specifying the contents selected by the member device 604, this information includes various prepared contents interpreted as "play-list information" and advertisement information; Page 7, Paragraphs 0145 - 0147)**, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output **(the contents distribution processing unit (Fig. 11, element 1102) receives a URL (Uniform Resource Locator) indicating the position for storing a file of the contents, then, reading the file from the contents data recording unit (Fig. 11, element 1103), and transmitting an output of the file to the member device (Fig. 6, element 604); Page 7, Paragraph 0145)**; the play-list **(various prepared contents interpreted as "play-list information"; Page 7, Paragraph 0147)**, based on the received play-list information **(various prepared contents interpreted as "play-list information"; Page 7, Paragraph 0147)**.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Tsuchiya to the modified system of Montpetit with AARTS to improve the quality of the user's estimation information by appraising the estimation information of one user by another user **(Tsuchiya: Page 1, Paragraph 0017)**.

Conclusion

11. **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.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATALI N. PASCUAL PEGUERO whose telephone number is (571)272-4691. The examiner can normally be reached on Monday - Friday 7:30am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, UN C. CHO can be reached on (571)272-7919. 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 http://pair-direct.uspto.gov. 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.

/NATALI N PASCUAL PEGUERO/
Examiner, Art Unit 2413

/Xavier Szewai Wong/
Primary Examiner, Art Unit 2413
21st February 2014

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	Art Unit
	NATALI N PASCUAL PEGUERO	2413

CPC- SEARCHED		
Symbol	Date	Examiner
H04L 29/08072, H04L 29/06, H04L 29/0809, H04L 29/08981 and H04L29/08117	2/20/2014	NP

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
709	217,219		

SEARCH NOTES		
Search Notes	Date	Examiner
East Search including keywords,class/subclass,inventor,assignee	5/1/2013	NP
IP.com Patent Search	5/1/2013	NP
Updated Search in EAST	2/20/2014	NP
H04L 29/08072, H04L 29/06, H04L 29/0809, H04L 29/08981 and H04L29/08117 (Text Search only)	2/20/2014	NP

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

/NATALI N PASCUAL PEGUERO/ Examiner.Art Unit 2413	

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	37	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:40
L2	239	((KAZUO) near2 (ASAMI)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:41
L3	49	((KUNIHIRO) near2 (TANIGUCHI)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:41
L4	41734	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:42
L5	2	l1 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
L6	2	l2 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
L7	2	l3 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
L8	0	l4 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 14:51
L9	12	("20030105669" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:28
L10	2	l9 and attribute	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:28
L11	74272	(H04L29/08072 H04L29/06 H04L29/0809 H04L29/08981 H04L29/08117).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38
L12	3124	l11 and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38

L13	844	l12 and attribute	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:38
L14	1509	"l14" and delivery	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:39
L15	14	l14 and (content near2 selection)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:39
L16	1	@ad< "20081118" and l15	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:40
L17	69263	@ad< "20081118" and l11	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:40
L18	159	l17 and (advertisement and (content near2 selection))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:41
L19	37	l18 and (application near2 server)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/20 15:41
S1	1	"13129756"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 12:02
S2	2	"20110225270"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 12:22
S4	4	"2008022298"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 15:13
S6	1	"12099489"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 15:55
S7	4	"10287835"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 16:29
S8	2	"20030105669"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 16:30
S16	2639	((core near2 IMS) or (core near2 (Internet adj Protocol adj Multimedia adj Subsystem)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:56
S17	1275	@ad< "20081118" and S16	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2013/04/30 16:57

			IBM_TDB			
S18	67	S17 and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:57
S19	60	S18 and (user near2 (device or equipment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:58
S23	20	S19 and "370".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:01
S24	20	S16 and S23	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:02
S25	18	S19 and "709".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:07
S26	1	"13063122"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 21:21
S32	21	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:17
S33	173	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:18
S34	36	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:18
S36	10	("20030105669" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:24
S37	40211	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:26
S38	21	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:28
S39	2	S38 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:28
S40	173	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29

S41	2	S40 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S42	36	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S43	2	S42 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
S44	908	(Application near2 server) and (connection near2 control) and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:34
S45	502	@ad< "20081118" and S44	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:35
S46	235	S45 and ((user near2 (device or equipment)) and (storage) and (user near2 information))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:36
S47	19	S46 and 709/219,217.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
S48	5409367	(content delivery system).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
S49	2	S48 and S41	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
S50	702	S44 and (delivery)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:38
S51	44	S50 and 709/219,217.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:38

EAST Search History (Interference)

<This search history is empty>

2/20/2014 3:42:23 PM
C:\Users\npascualpeguero\Documents\EAST\Workspaces\13129756.wsp

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (01-10)
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	13129756
Filing Date	2011-05-17
First Named Inventor	Kunihiro Taniguchi
Art Unit	2413
Examiner Name	PASCUAL PEGUERO, NATALI
Attorney Docket Number	J-11-0248

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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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Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	2004-140584	JP	A	2004-05-13	ANDO, ARATA	English Abstract. Cited in the JPOA.	☐

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Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

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	Filing Date	2011-05-17
	First Named Inventor	Kunihiro Taniguchi
	Art Unit	2413
	Examiner Name	PASCUAL PEGUERO, NATALI
	Attorney Docket Number	J-11-0248

	1	Japanese Office Action for JP Application No. 2010-539136 mailed on November 19, 2013 with English Translation.	☒

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Examiner Signature	/Natali Pascual Peguero/	Date Considered	02/16/2014

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[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.

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	Filing Date	2011-05-17
	First Named Inventor	Kunihiro Taniguchi
	Art Unit	2413
	Examiner Name	PASCUAL PEGUERO, NATALI
	Attorney Docket Number	J-11-0248

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

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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	/Kelly G. Hyndman 39,234/	Date (YYYY-MM-DD)	2013-12-17
Name/Print	Kelly G. Hyndman	Registration Number	39234

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.**

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Peloton - Ex. 1002, Page: 783
IPR2023-01241 (Peloton v. NEC)

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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.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

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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.

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ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH./N.P./

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	Art Unit
	NATALI N PASCUAL PEGUERO	2413

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

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/01/2013	02/20/2014							
	1	✓	✓							
	2	✓	✓							
	3	✓	✓							
	4	✓	✓							
	5	✓	✓							
	6	✓	✓							
	7	✓	✓							
	8	✓	✓							
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	33		✓							
	34		✓							
	35		✓							
	36		✓							

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Application Number	13129756
Filing Date	2011-05-17
First Named Inventor	Kunihiro Taniguchi
Art Unit	2413
Examiner Name	PASCUAL PEGUERO, NATALI
Attorney Docket Number	J-11-0248

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	1	2004-140584	JP	A	2004-05-13	ANDO, ARATA	English Abstract. Cited in the JPOA.	☐

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Examiner Signature		Date Considered	

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[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.

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	Attorney Docket Number	J-11-0248

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OR

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☒ 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	/Kelly G. Hyndman 39,234/	Date (YYYY-MM-DD)	2013-12-17
Name/Print	Kelly G. Hyndman	Registration Number	39234

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.**

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Docket No. J-11-0248

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Kunihiro Taniguchi et al.
Application No.: 13/129,756 Art Unit: 2413

Filed: 05-17-2011 Examiner: PASCUAL PEGUERO, NATALI

Confirmation Number: 1971

For: CONTENT DELIVERY SYSTEM

INFORMATION DISCLOSURE STATEMENT WITH CERTIFICATION UNDER 37 C.F.R. § 1.704(d)

I hereby certify that each item of information contained in the co-filed information disclosure statement was first cited in a communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 CFR 1.56(c) more than thirty (30) days prior to the filing of the co-filed information disclosure statement.

Respectfully submitted,

/Kelly G. Hyndman 39,234/

Kelly G. Hyndman

Reg. No. 39,234

December 17, 2013

Sughrue Mion, PLLC
2100 Pennsylvania Ave., N.W.
Washington,DC 20037
Telephone: 202-775-7585
Facsimile: 202-293-2483

Electronic Acknowledgement Receipt

EFS ID:	17678049
Application Number:	13129756
International Application Number:	
Confirmation Number:	1971
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Customer Number:	71799
Filer:	Kelly G. Hyndman/Andrew Annis
Filer Authorized By:	Kelly G. Hyndman
Attorney Docket Number:	J-11-0248
Receipt Date:	17-DEC-2013
Filing Date:	17-MAY-2011
Time Stamp:	11:36:32
Application Type:	U.S. National Stage under 35 USC 371

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)	IDS_SB_08.pdf	612317 15f9588a0ad8ff7f3307313c1b9970c7b48cdcdf	no	4

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2	Transmittal Letter	IDS_Statement.pdf	12563 fe75edacf3bdda548b9d530a9f40b78364ec18d4	no	1
Warnings:					
Information:					
3	Non Patent Literature	JP_OA.pdf	171933 6cc000406f8693c02b9ab379307ce9d25ad1e11c	no	9
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4	Foreign Reference	JP_2004-140584.pdf	662463 0248584abb3932202025965a11493c962053ec46	no	23
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/129,756	05/17/2011	Kunihiro Taniguchi	J-11-0248	1971

71799 7590 11/15/2013

Mr. Ryoichi Harada
2100 Pennsylvania Ave., NW
SUITE 560
Washington, DC 20037-3213

EXAMINER	
PASCUAL PEGUERO, NATALI	

ART UNIT	PAPER NUMBER
2413	

NOTIFICATION DATE	DELIVERY MODE
11/15/2013	ELECTRONICELECTRONIC

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):

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Applicant-Initiated Interview Summary	Application No.	Applicant(s)	
	13/129,756	TANIGUCHI ET AL.	
	Examiner	Art Unit	
	NATALI N. PASCUAL PEGUERO	2413	

All participants (applicant, applicant's representative, PTO personnel):

(1) *NATALI N. PASCUAL PEGUERO*.

(2) *Michael Smith (Reg. No. 71190)*.

(3) *Xavier Wong (Primary)*.

(4) _____.

Date of Interview: *12 November 2013*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☐ No.
If Yes, brief description: _____.

Issues Discussed ☐101 ☐112 ☐102 ☒103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *1 and 5*.

Identification of prior art discussed: *AARTS (Pub # US 2008/0256216 A1)*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

The Applicant's Representative discussed the general background of the invention, and the differences between the claimed subject matter and the cited reference.The Applicant's Representative discussed claims 1 and 5. The Primary Examiner suggestted to the Applicant's Representative to indicate in the amendments more details about assigning attributes, selecting advertisement content based on said attributes and storing advertisements in different categories. No agreement was reached .

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.

☐ Attachment

/NATALI N PASCUAL PEGUERO/ Examiner, Art Unit 2413	/UN C. CHO/ Supervisory Patent Examiner, Art Unit 2413

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Kunihiro Taniguchi et al.	Confirmation No.:	1971
Application No.:	13/129,756	Art Unit:	2413
Filed:	May 17, 2011	Examiner:	N. P. Pascual
Title:	CONTENT DELIVERY SYSTEM		

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT IN RESPONSE TO NON-FINAL OFFICE ACTION UNDER 37 C.F.R. 1.111

Dear Sir:

In response to the Office Action dated May 15, 2013, please amend the above-identified U.S. patent application as follows. Applicant concurrently files herewith a Three-Month Petition for Extension of Time.

Amendments to the Claims begin on page 2 of this paper.

Remarks/Arguments begin on page 23 of this paper.

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A content delivery system comprising an application server system and a connection control system,

the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information,

the application server system comprising:

a content storage unit for storing sub content data representing sub content and main content data representing main content;

a delivery request reception unit for receiving~~, via the connection control system,~~ a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

~~an~~ a sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request.

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2. (Previously Presented) The content delivery system according to claim 1, wherein:

the user equipment comprises:

a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the application server system; and

a content viewing request transmission unit for transmitting, to the application server system, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system, and

the application server system comprises a content delivering unit for receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by the main content identification information contained in the received main content viewing request to the user equipment, and for receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by the selected sub content specification information contained in the received sub content viewing request to the user equipment.

3. (Previously Presented) The content delivery system according to claim 1, wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting, based on the received main content data

and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

4. (Previously Presented) The content delivery system according to claim 1, wherein:

the selected sub content specification information transmission unit is configured to transmit, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output;

the selected sub content specification information reception unit is configured to receive the play-list information transmitted by the application server system; and

the content viewing request transmission unit is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information.

5. (Previously Presented) The content delivery system according to claim 1, wherein:

the content storage unit is configured to store the sub content data in association with

attribute information representing an attribute of sub content represented by the sub content data;

the selection information contains user basic information that is information for specifying the attribute information and is information associated with user identification information for identifying a user of the user equipment; and

the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the user basic information associated with the user identification information for identifying the user of the user equipment which has transmitted the content delivery request.

6. (Previously Presented) The content delivery system according to claim 1, wherein:

the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of the sub content represented by the sub content data;

the selection information contains content basic information that is information for specifying the attribute information and is information associated with the main content identification information for identifying the main content; and

the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the content basic information associated with the main content identification information contained in the received content delivery request.

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7. (Previously Presented) The content delivery system according to claim 1, wherein the selected sub content specification information transmission unit is configured to transmit the selected sub content specification information to the user equipment via the connection control system when the connection control system executes a process for establishing the connection.

8. (Previously Presented) The content delivery system according to claim 7, wherein

the connection control system is configured to establish the connection by exchanging a predetermined connection establishment message with each of the user equipment and the application server system; and

the selected sub content specification information transmission unit is configured to transmit the selected sub content specification information to the user equipment via the connection control system by incorporating the selected sub content specification information in the connection establishment message.

9. (Previously Presented) The content delivery system according to claim 1, wherein:

the application server system comprises a service control server and a media server; and

the service control server comprises the delivery request reception unit, the sub content selection unit, and the selected sub content specification information transmission unit.

10. (Previously Presented) The content delivery system according to claim 1, wherein:

The application server system comprises a service control server and a media server;

the service control server comprises the delivery request reception unit;

the media server comprises the content storage unit, the sub content selection unit, and the selected sub content specification information transmission unit;

the service control server further comprises an selection information transmission unit for transmitting the selection information to the media server via the connection control system;

the media server further comprises an selection information reception unit for receiving the selection information transmitted by the service control server; and

the sub content selection unit is configured to select the sub content data based on the received selection information.

11. (Previously Presented) A content delivery system comprising an application server system and a connection control system,

the connection control system comprising a core IMS (Internet Protocol Multimedia Subsystem) part for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a media functions part for transmitting content data representing content to the user

equipment with which connection is established by the core IMS part;

a service control functions part for controlling a service provided by the media functions part; and

a user profile server functions part for storing profile information of a user of the user equipment,

the media functions part comprising a content storage unit for storing sub content data representing sub content and main content data representing main content,

the service control functions part comprising:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the core IMS part; and

an sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content and preliminarily stored by the user profile server functions part, the service control functions part or the connection control system; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information for specifying the selected sub content data~~,~~ via the core IMS part to the user equipment which has transmitted the content delivery request.

12. (Previously Presented) The content delivery system according to claim 11, wherein:

the user equipment comprises:

a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the service control functions part; and

a content viewing request transmission unit for transmitting, to the media functions part, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information, when connection with the media functions part is established by the core IMS part, and

the media functions part comprises a content delivering unit for receiving the main content viewing request transmitted by the user equipment and transmitting to the user equipment main content data identified by the main content identification information contained in the received main content viewing request, and for receiving the sub content viewing request transmitted by the user equipment and transmitting to the user equipment sub content data specified by the selected sub content specification information contained in the received sub content viewing request.

13. (Previously Presented) The content delivery system according to claim 11, wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the media functions part, and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

14. (Previously Presented) The content delivery system according to claim 11, wherein

the selected sub content specification information transmission unit is configured to transmit, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output;

the selected sub content specification information reception unit is configured to receive the play-list information transmitted by the service control functions part; and

the content viewing request transmission unit is configured to transmit the main content viewing request and the sub content viewing request to the media functions part, based on the received play-list information.

15. (Currently Amended) A content delivery method comprising:

receiving equipment specification information transmitted by user equipment and establishing connection between an application server system and the user equipment based on the received equipment specification information, by a connection control system;

receiving~~, via the connection control system,~~ a content delivery request containing main content identification information for identifying main content and transmitted by the user

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equipment, by the application server system;

selecting sub content data stored in a storing device for storing sub content data representing sub content and main content data representing main content, based on selection information containing attribute information representing an attribute of sub content; and

transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request, by the application server system.

16. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the selected sub content specification information transmitted by the application server system, by the user equipment;

transmitting, to the application server system, a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information, by the user equipment, when connection between the user equipment and the application server system is established by the connection control system; and

receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by main content identification information contained in the received main content viewing request to the user equipment, and receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by selected

sub content specification information contained in the received sub content viewing request to the user equipment, by the application server system.

17. (Previously Presented) The content delivery method according to claim 15, comprising:

receiving the main content data and the sub content data transmitted by the application server system, and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data, by the user equipment.

18. (Previously Presented) The content delivery method according to claim 15, comprising:

transmitting, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output, by the application server system;

receiving the play-list information transmitted by the application server system, by the user equipment; and

transmitting the main content viewing request and the sub content viewing request to the application server system based on the received play-list information, by the user equipment.

19. (Previously Presented) A service control server comprising:

a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment via a connection control system establishing connection between a media server and the user equipment

an sub content selection unit for selecting sub content data preliminarily stored in a storing device, based on selection information containing attribute information representing an attribute of sub content; and

a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request.

20. (Previously Presented) The service control server according to claim 19, wherein the selected sub content specification information transmission unit is configured to transmit, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained

in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which main content identified by the main content identification information and sub content specified by the selected sub content specification information are output.

21. (Currently Amended) A user equipment comprising:

a selected sub content specification information reception unit for receiving selected sub content specification information selected based on selection information containing attribute information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application server system, via a connection control system establishing connection between the application server system and the user equipment; and

a content viewing request transmission unit for transmitting, to the application server system, a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system.

22. (Previously Presented) The user equipment according to claim 21, further comprising:

a content outputting unit for receiving main content data and sub content data transmitted by

the application server system, and outputting, based on the received main content data and sub content data, viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data.

23. (Previously Presented) The user equipment according to claim 21, wherein:

the selected sub content specification information reception unit is configured to receive play-list information which is information containing the main content identification information and the selected sub content specification information, and containing information indicating a sequence in which main content identified by the main content identification information and sub content specified by the selected sub content specification information are output, and is information transmitted by the application server system; and

the content viewing request transmission unit is configured to transmit the main content viewing request and the sub content viewing request to the application server system, based on the received play-list information.

24. (Previously Presented) The content delivery system according to claim 1, wherein the sub content is advertisement content.

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25. (Currently Amended) A content delivery system comprising an application server system and a connection control system,

the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information,

the application server system comprising:

content storage means for storing sub content data representing sub content and main content data representing main content;

delivery request reception means for receiving~~, via the connection control system,~~ a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

sub content selection means for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content; and

selected sub content specification information transmission means for transmitting selected sub content specification information for specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request.

26. (Previously Presented) A content delivery system comprising an application server system and a connection control system,

the connection control system comprising a core IMS (Internet Protocol Multimedia Subsystem) part for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a media functions part for transmitting content data representing content to the user equipment with which the connection is established by the core IMS part;

a service control functions part for controlling a service provided by the media functions part; and

a user profile server functions part for storing profile information of a user of the user equipment,

the media functions part comprising content storage means for storing sub content data representing sub content and main content data representing main content,

the service control functions part comprising:

delivery request reception means for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the core IMS part; and

sub content selection means for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content and preliminarily stored by the user profile server functions part, the service control functions part or the connection control system; and

selected sub content specification information transmission means for transmitting selected sub content specification information for specifying the selected sub content data , via the core IMS part to the user equipment which has transmitted the content delivery request.

27. (Previously Presented) A service control server comprising:

delivery request reception means for receiving a content delivery request containing main content identification information for identifying main content and transmitted by user equipment, via a connection control system establishing connection between a media server and the user equipment;

sub content selection means for selecting sub content data preliminarily stored in a storing device based on selection information containing attribute information representing an attribute of sub content; and

selected sub content specification information transmission means for transmitting selected sub content specification information specifying the selected sub content data, via the connection control system to the user equipment which has transmitted the content delivery request.

28. (Currently Amended) A user equipment comprising:

selected sub content specification information reception means for receiving selected sub content specification information <u>selected based on selection information containing attribute</u>

information representing an attribute of sub content and which is information for specifying selected sub content data and transmitted by an application server system, via a connection control system establishing connection between the application server system and the user equipment; and

content viewing request transmission means for transmitting, to the application server system, a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information, when connection with the application server system is established by the connection control system.

29. (New) A server configured to perform operations comprising:

storing a plurality of sub content data and a plurality of main content data, wherein each of the plurality of sub content data is associated with one or more sub content attributes;

receiving a content delivery request from a user device, wherein the content delivery request identifies first main content data of the plurality of main content data;

selecting at least first sub content data and second sub content data from the plurality of sub content data based on the first sub content data and the second sub content data being associated with at least a particular attribute of the sub content attributes; and

transmitting a first choice option corresponding to the first sub content data and a second choice option corresponding to the second sub content data to the user device.

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30. (New) The server according to claim 29, wherein the server is further configured to perform operations comprising:

receiving a sub content viewing request from the user device, wherein the sub content viewing request contains a selected choice corresponding to either the first choice option or the second choice option;

transmitting the first sub content data to the user device as selected sub content data if the selected choice corresponds to the first choice option;

transmitting the second sub content data to the user device as the selected sub content data if the selected choice corresponds to the second choice option; and

transmitting the first main content data identified by the content delivery request to the user device.

31. (New) The server according to claim 30, wherein a user inputs a selection command to the user device to select the first choice option or the second choice option as the selected choice.

32. (New) The server according to claim 30, wherein the server is further configured to perform operations comprising:

transmitting the first main content data and the selected sub content data to the user device for viewing on the user device.

33. (New) The server according to claim 29, wherein the content delivery request from the user device contains user information about a user of the user device, and

wherein the server is further configured to perform operations comprising selecting the first sub content data and the second sub content data when the particular attribute corresponds to the user information.

34. (New) The server according to claim 30, wherein the content delivery request from the user device contains user information about a user of the user device, and

wherein the server is further configured to perform operations comprising selecting the first sub content data and the second sub content data when the particular attribute corresponds to the user information.

35. (New) The server according to claim 29, wherein the server is further configured to perform operations comprising:

associating each of the plurality of main content data with one or more main content attributes;

selecting the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content.

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36. (New) The server according to claim 30, wherein the server is further configured to perform operations comprising:

associating each of the plurality of main content data with one or more main content attributes;

selecting the first and second sub content data when the particular attribute corresponds to a particular main content attribute of the first main content.

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REMARKS

Claims 1-28 have been examined. Claims 1, 5-9, 11, 14, 19-21 and 24-26 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting, claims 1-3, 5-10, 15-17, 19, 21, 22, 24, 25, 27 and 28 were rejected under 35 U.S.C. § 102(e), and claims 4, 11-13, 14, 18, 20, 23, 26 were rejected under 35 U.S.C. § 103(a).

I. Examiner Interview

The undersigned thanks Examiner Pascual and her supervisor for the courtesies extended during the interview conducted on November 12, 2013. The undersigned thanks Examiner Pascual and her supervisor for the opportunity to discuss the application and appreciates the Examiner's further review of the remarks set forth in this reply.

II. Double Patenting Rejection

Claims 1, 5-9, 11, 14, 19-21 and 24-26 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 6-8, 11, 13 and 19-24 of copending U.S. Application No. 13/063122. Since neither the present application nor U.S. Application No. 13/063122 has issued into a patent, Applicant respectfully submits that the rejection is premature and respectfully requests that this rejection be held in abeyance until the copending application issues or until the Examiner concludes that the present application contains allowable subject matter.

III. Rejection under 35 U.S.C. § 102(e) over U.S. Patent Application Publication No. 2008/0256216 to AARTS ("AARTS")

Claims 1-3, 5-10, 15-17, 19, 21, 22, 24, 25, 27 and 28 were rejected under 35 U.S.C. § 102(e) as being anticipated by AARTS.

A. Claim 1

Applicant submits that AARTS does not disclose all of the features of claim 1. For example, claim 1 states that an application server system comprises a sub content selection unit for selecting stored sub content data based on selection information containing attribute information representing an attribute of the sub content. In other words, in claim 1, the stored sub content can be selected *based on selection information containing attribute information representing an attribute of the sub content*. By contrast, in AARTS, the authentication service 16 transmits general information for allowing an advertisement to be personalized to the user, such as age, gender, geographic information or any other information, as appropriate, and the advertisement service generates advertisement information in accordance with the received authentication information. *See, e.g.*, AARTS, paragraphs 0023-0024. AARTS fails to disclose or even suggest selection of stored sub content *based on selection information containing attribute information representing an attribute of the sub content*. Instead, in AARTS, the advertisement service merely generates advertisement information in accordance with the received authentication information.

Accordingly, Applicant submits that claim 1 is patentable for at least the reasons presented above.

B. Claims 2, 3 and 5-10

Since claims 2, 3 and 5-10 depend on claim 1, they are patentable at least based on their dependency. Moreover, these claims recite additional features which are not disclosed, or even suggested, by AARTS.

For example, claim 5 recites a content storage unit that is configured to store the sub content data in association with attribute information representing an attribute of sub content represented by the sub content data. In addition, the selection information contains user basic information for specifying the attribute information and is associated with user identification information for identifying a user of the user equipment. Finally, the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the user basic information associated with the user identification information for identifying the user of the user equipment which has transmitted the content delivery request.

By contrast, as noted above, in AARTS, the advertisement service merely generates advertisement information in accordance with the received authentication information. AARTS fails to disclose or even suggest storing the sub content data in association with attribute information representing an attribute of sub content represented by the sub content data, using selection information that contains user basic information for specifying the attribute information and is associated with user identification information for identifying a user of the user equipment, and selecting sub content data stored in association with the attribute information specified by the user basic information associated with the user identification information for identifying the user of the user equipment which has transmitted the content delivery request, as claimed.

Accordingly, claim 5 is patentable for at least this additional reason.

C. Claims 15, 19, 21, 25, 27, and 28

Claims 15, 19, 21, 25, 27, and 28 contain features that are similar or analogous to those discussed in conjunction with claim 1. Therefore, Applicant submits that these claims are patentable over AARTS for at least similar reasons.

D. Claims 16, 17, 22, and 24

Since claims 16, 17, 22, and 24 depend on claims 1, 15, and 21, they are patentable at least based on their dependency.

IV. Rejection under 35 USC § 103(a) over AARTS in view of U.S. Patent Application Publication No. 2003/0105669 to Tsuchiya ("Tsuchiya")

Claims 4, 18, 20 and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over AARTS in view of Tsuchiya. Since these claims depend on claim 1, 15, 19, or 21 and since the Tsuchiya does not cure the deficient teachings of AARTS with respect to claims 1, 15, 19, and 21, claims 4, 18, 20, and 23 are patentable over AARTS in view of Tsuchiya at least based on their dependency.

V. Rejection under 35 USC § 103(a) over AARTS in view of U.S. Patent Application Publication No. 2007/0223523 to Montpetit et al. ("Montpetit")

Claims 11-13, and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over AARTS in view of Montpetit.

A. Claims 11 and 26

Claims 11 and 26 contain features that are similar or analogous to those discussed in conjunction with claim 1, and since Montpetit does not cure the deficient teachings of AARTS with respect to claim 1, Applicant submits that claims 11 and 26 are patentable for at least similar reasons.

B. Claims 12-13

Since claims 12-13 depend upon claim 11, and since the Montpetit does not cure the deficient teachings of AARTS with respect to claim 11, claims 12-13 are patentable over AARTS in view of Montpetit at least based on their dependency.

VI. Rejection under 35 USC § 103(a) over AARTS in view of Montpetit and Tsuchiya

Claim 14 was rejected under 35 U.S.C. § 103(a) as being unpatentable over AARTS in view of Montpetit and Tsuchiya. Since claim 14 depends upon claim 11, and since Montpetit and Tsuchiya do not cure the deficient teachings of AARTS with respect to claim 11, claim 14 is patentable at least based on its dependency.

VII. New Claims

Applicant has added new claims 29-36. Claim 29 states that sub content data is associated with one or more attributes and that a server is configured to select first and second sub content data based on the data being associated with a particular attribute. The claim further states that the server is configured to transmit first and second choice options corresponding to the first and second

sub content data to a user device. Since the prior art does not disclose or suggest these features, Applicant submits that claim 29 is patentable. Also, since claims 30-36 depend upon claim 29, Applicant submits that they are patentable at least based on their dependency.

VIII. Conclusion

In view of the above amendment, Applicant believes the pending application is in condition for allowance. The fee for a Three-Month Extension of Time is being paid herewith via credit card. Applicant believes no other fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-0219, under Order No. 2207946.00141US1, from which the undersigned is authorized to draw.

Respectfully submitted,

Dated: November 15, 2013

/Grant K. Rowan/
Grant K. Rowan
Registration No.: 41,278
Attorney for Applicant

Wilmer Cutler Pickering Hale and Dorr LLP
1875 Pennsylvania Avenue, NW
Washington, DC 20006
(202) 663-6000 (telephone)
(202) 663-6363 (facsimile)

Electronic Patent Application Fee Transmittal

Application Number:	13129756
Filing Date:	17-May-2011
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Filer:	Grant Kelly Rowan/Tania Thomas
Attorney Docket Number:	J-11-0248

Filed as Large Entity

U.S. National Stage under 35 USC 371 Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Claims in excess of 20	1615	8	80	640
Independent claims in excess of 3	1614	1	420	420
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Extension - 3 months with $0 paid	1253	1	1400	1400
Miscellaneous:				
			Total in USD ($)	**2460**

Electronic Acknowledgement Receipt

EFS ID:	17415658
Application Number:	13129756
International Application Number:	
Confirmation Number:	1971
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Customer Number:	71799
Filer:	Grant Kelly Rowan/Tania Thomas
Filer Authorized By:	Grant Kelly Rowan
Attorney Docket Number:	J-11-0248
Receipt Date:	15-NOV-2013
Filing Date:	17-MAY-2011
Time Stamp:	20:16:42
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$2460
RAM confirmation Number	7557
Deposit Account	
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)

Peloton - Ex. 1002, Page 827
IPR2023-01241 (Peloton v. NEC)

1	Extension of Time	2207946_00141US1_111513_EOT.PDF	77523 f423232d6e6e613db594dcdfc0e2e9e862518ce4	no	1
Warnings:					
Information:					
2		2207946_00141US1_111513_Amendment.PDF	170238 28760c743f11ad376289e2b2fe1e0e197baa79f4	yes	29

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	22
	Applicant Arguments/Remarks Made in an Amendment	23	29

Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	33724 77ef1228164aec4de45e1d2b445b0ae02b61a629	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	281485		

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.

PTO/AIA/22 (03-13)
Approved for use through 03/31/2013. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)	Docket Number (Optional) 2207946.00141US1
Application Number 13/129,756-Conf. #1971	Filed May 17, 2011
For CONTENT DELIVERY SYSTEM	
Art Unit 2413	Examiner Pascual Peguero, Natali

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

	Fee	Small Entity Fee	Micro Entity Fee	
☐ One month (37 CFR 1.17(a)(1))	$200	$100	$50	$
☐ Two months (37 CFR 1.17(a)(2))	$600	$300	$150	$
☒ Three months (37 CFR 1.17(a)(3))	$1,400	$700	$350	$ 1,400.00
☐ Four months (37 CFR 1.17(a)(4))	$2,200	$1,100	$550	$
☐ Five months (37 CFR 1.17(a)(5))	$3000	$1,500	$750	$

☐ Applicant asserts small entity status. See 37 CFR 1.27.

☐ Applicant certifies micro entity status. See 37 CFR 1.29.
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

☐ A check in the amount of the fee is enclosed.

☒ Payment by credit card. ~~Form PTO-2038 is attached.~~

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☒ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 08-0219 .

☒ Payment made via 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.

I am the

☐ applicant.

☐ attorney or agent of record. Registration Number _____.

☒ attorney or agent acting under 37 CFR 1.34. Registration number 41,278 .

/Grant K. Rowan/	November 15, 2013
Signature	Date
Grant K. Rowan	(202) 663-6000
Typed or printed name	Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

☐ *Total of 1 forms are submitted.

117844000

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/129,756	Filing Date 05/17/2011	☐ To be Mailed

ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) 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), (i), 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 $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ 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

AMENDMENT	11/15/2013	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 36	Minus	** 28	= 8	X $80 =	640
	Independent (37 CFR 1.16(h))	* 10	Minus	***9	= 1	X $420 =	420
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	**1060**

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
	☐ 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.
** 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 number found in the appropriate box in column 1.

LIE
/KIMBERLY WHITE/

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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Mr. Jackson Chen
6535 N. STATE HWY 161
IRVING, TX 75039

Courtesy Reminder for
Application Serial No: 13/129,756

Attorney Docket No: J-11-0248
Customer Number: 71799
Date of Electronic Notification: 05/15/2013

This is a courtesy reminder that new correspondence is available for this application. If you have not done so already, please review the correspondence. The official date of notification of the outgoing correspondence will be indicated on the form PTOL-90 accompanying the correspondence.

An email notification regarding the correspondence was sent to the following email address(es) associated with your customer number:
ryoichi.harada@necam.com

To view your correspondence online or update your email addresses, please visit us anytime at **https://sportal.uspto.gov/secure/myportal/privatepair.** If you have any questions, please email the Electronic Business Center (EBC) at EBC@uspto.gov or call 1-866-217-9197.

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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/129,756	05/17/2011	Kunihiro Taniguchi	J-11-0248	1971

71799 7590 05/15/2013

Mr. Jackson Chen
6535 N. STATE HWY 161
IRVING, TX 75039

EXAMINER	
PASCUAL PEGUERO, NATALI	
ART UNIT	PAPER NUMBER
2413	

NOTIFICATION DATE	DELIVERY MODE
05/15/2013	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):

ryoichi.harada@necam.com

Office Action Summary	Application No. 13/129,756	Applicant(s) TANIGUCHI ET AL.	
	Examiner NATALI N. PASCUAL PEGUERO	Art Unit 2413	AIA (First Inventor to File) 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 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, 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 *17 May 2011*.

☐ 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) *1-28* 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) *1-28* 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 *17 May 2011* 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.

Interim copies:

a)☐ All b)☐ Some c)☐ None of the: Interim copies of the priority documents have been received.

Attachment(s)

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

2) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *05/19/2011 and 11/20/2012*.

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

4) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on May 19, 2011 and November 20, 2012 have been placed in record and considered by the examiner.

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 obviousness-type 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); and *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 a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims **1, 5 - 9, 11, 14, 19 - 21 and 24-26** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims **1 - 3, 6 - 8, 11, 13 and 19 - 24** of copending Application **No. 13/063122**.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed limitations are similar in scope with broader recitation. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 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 –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1 - 3, 5 - 10, 15 - 17, 19, 21 – 22, 24 - 25, and 27 - 28 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by AARTS (Pub # US 2008/0256216 A1).

Regarding claim 1, AARST discloses a content delivery system (a method of supplying advertising content; Page 1, Paragraph 0001) comprising an application server system (an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021) and a connection control system (an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021), the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information (the authentication service interpreted as “the connection control system" is configured to receive information corresponding to

identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021), the application server system (the advertisement service interpreted as “the application service system”; Page 2, Paragraph 0021) comprising: a content storage unit for storing sub content data representing sub content and main content data representing main content (the advertisement service stores advertisement information in store (Fig. 1, element 13a), and may also track advertisement data sent to a particular user or device; Page 2, Paragraph 0021); a delivery request reception unit for receiving (the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021), via the connection control system (the authentication service interpreted as “the connection control system"; Page 2, Paragraph 0021), a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content (the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022); an sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content (Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023); and a selected sub content specification information transmission unit for transmitting selected

sub content specification information for specifying the selected sub content data (Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023) via the connection control system (an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021) to the user equipment which has transmitted the content delivery request (Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022).

Regarding claim 2, AARTS discloses wherein: the user equipment comprises (the user device interpreted as “user equipment"; Page 2, Paragraph 0021): a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the application server system (Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022); and a content viewing request transmission unit for transmitting (Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022), to the application server system (the advertisement service interpreted as “the application service system”; Page 2, Paragraph 0021), a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system (Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to

enable appropriate advertisement information; Page 2, Paragraph 0022), and the application server system comprises a content delivering unit for receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by the main content identification information contained in the received main content viewing request to the user equipment (the advertisement service receives a data request in the store (Fig. 1, element 13a) from the user device in accordance to the user's desired content transmitted by the authentication service, and at step 34 transmits the advertisement information to the user device 10; Page 2, Paragraphs 0021 - 0023), and for receiving the sub content viewing request transmitted by the user equipment and transmitting sub content data specified by the selected sub content specification information contained in the received sub content viewing request to the user equipment (Fig. 3, step 30 shows that the advertisement service receives the data request from the user device, and at step 34 transmits the advertisement information to the user device; Page 2, Paragraph 0023).

Regarding claim 3, AARTS discloses wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the application server system and outputting (Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022), based on the received main content data and sub content data (in accordance with the newly received content information interpreted as “the main content data” and advertisement information interpreted as “the sub content data”; Page 2, Paragraph 0022), viewing content in which sub content

represented by the sub content data is inserted in main content represented by the main content data (the advertisement service generates advertisement information interpreted as “the sub content” in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023).

Regarding claim 5, AARTS discloses wherein: the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of sub content represented by the sub content data (the content service (Fig. 1, element 11) interpreted as “the content storage unit” is configured to store the content information comprising content data to be used in providing an output to the user, and metadata interpreted as “an attribute of sub content” to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022); the selection information contains user basic information that is information for specifying the attribute information and is information associated with user identification information for identifying a user of the user equipment (in the system of Fig. 5, the user device receives content data and metadata, but in this example the metadata comprises a pointer to authentications service, and the fig. 4, step 41 shows that the authentication service identifies the user device from the information transmitted; Page 2, Paragraph 0024 and 0029); and the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the user basic information (the authentication service transmits general information thus allowing an advertisement to be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2,

Paragraph 0023) associated with the user identification information for identifying the user (at step 33, the advertisement service generates advertisement information in accordance with the received authentication information used for identifying the user device; Page 2, Paragraph 0023) of the user equipment which has transmitted the content delivery request (Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022).

Regarding claim 6, AARTS discloses wherein: the content storage unit is configured to store the sub content data in association with attribute information representing an attribute of the sub content represented by the sub content data (the content service (Fig. 1, element 11) interpreted as “the content storage unit” is configured to store the content information comprising content data to be used in providing an output to the user, and metadata interpreted as “an attribute of sub content” to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022); the selection information contains content basic information that is information for specifying the attribute information and is information associated with the main content identification information for identifying the main content (the content information comprising content data to be used in providing an output to the user, and metadata to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022); and the sub content selection unit is configured to select sub content data stored in association with the attribute information specified by the content basic information associated with the main content identification information (the authentication service transmits general information thus allowing an advertisement to

be personalized to the user, such as age, gender, geographic information or any other information as appropriate. At step 33, the advertisement service generates advertisement information in accordance with the received authentication information; Page 2, Paragraph 0023) contained in the received content delivery request (Fig. 3, step 30 shows that the advertisement service receives the data request from the user device; Page 2, Paragraph 0023).

Regarding claim 7, AARTS discloses wherein the selected sub content specification information transmission unit is configured to transmit the selected sub content specification information to the user equipment via the connection control system when the connection control system executes a process for establishing the connection (Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service, and at step 34 the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023).

Regarding claim 8, AARTS discloses wherein the connection control system is configured to establish the connection by exchanging a predetermined connection establishment message with each of the user equipment and the application server system (the authentication service interpreted as “the connection control system" is configured to authenticate the user devices verifying the information contained in the authentication request (Fig. 1, element 17) or confirming the identity of the user devices; Page 2, Paragraph 0021); and the selected sub content specification information transmission unit is configured to transmit the selected sub content specification

information to the user equipment (Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023) via the connection control system (the authentication service interpreted as “the connection control system"; Page 2, Paragraph 0021) by incorporating the selected sub content specification information in the connection establishment message (Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information used for establishing connection with the user device; Page 2, Paragraph 0023).

Regarding claim 9, AARTS discloses wherein: the application server system comprises a service control server and a media server (an advertisement server (Fig. 1, element 13) interpreted as “the application server system” is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013); and the service control server comprises the delivery request reception unit (Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023), the sub content selection unit (the advertisement service generates advertisement information interpreted as “the sub content” in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023), and the selected sub content specification information transmission unit (Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023).

Regarding claim 10, AARTS discloses wherein: The application server system comprises a service control server and a media server (an advertisement server (Fig. 1, element 13) interpreted as “the application server system” is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013); the service control server comprises the delivery request reception unit (the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021); the media server comprises the content storage unit (the advertisement service stores advertisement information in store (Fig. 1, element 13a), the sub content selection unit (Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023), and the selected sub content specification information transmission unit (Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023); the service control server further comprises an selection information transmission unit for transmitting the selection information to the media server (Fig. 3, step 34 shows that the advertisement service transmits the advertisement information; Page 2, Paragraph 0023) via the connection control system (the authentication service interpreted as “the connection control system"; Page 2, Paragraph 0021); the media server further comprises an selection information reception unit for receiving the selection information transmitted by the service control server (Fig. 2, step 23 shows that the user device

receives advertisement information from the advertisement service; Page 2, Paragraph 0022); and the sub content selection unit is configured to select the sub content data based on the received selection information (the advertisement service generates advertisement information interpreted as “the sub content” in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023).

Regarding claim 15, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding claim 16, the claim is interpreted and rejected for the same reason as set forth in claim 2.

Regarding claim 17, the claim is interpreted and rejected for the same reason as set forth in claim 3.

Regarding claim 19, AARTS discloses a delivery request reception unit for receiving a content delivery request containing main content identification information for identifying main content (the advertisement device is operable to receive a data request (Fig. 1, element 14) from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022) and transmitted by a user equipment (Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022) via a connection control system establishing connection between a media server and the user equipment (Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023); an sub content selection unit for

selecting sub content data preliminarily stored in a storing device (the advertisement service generates advertisement information interpreted as “the sub content” in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023), based on selection information containing attribute information representing an attribute of sub content (the content information comprising content data to be used in providing an output to the user, and metadata interpreted as “an attribute of sub content” to enable appropriate advertisement information to be obtained; Page 2, Paragraph 0022); and a selected sub content specification information transmission unit for transmitting selected sub content specification information specifying the selected content data via the connection control system to the user equipment which has transmitted the content delivery request (Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023).

Regarding claim 21, AARTS discloses a user equipment comprising (the user device interpreted as “user equipment"; Page 2, Paragraph 0021): a selected sub content specification information reception unit for receiving selected sub content specification information which is information for specifying selected sub content data and transmitted by an application server system (Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022), via a connection control system establishing connection between the application server system and the user equipment (Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in

order to establish connection with the advertisement service; Page 2, Paragraph 0023); and a content viewing request transmission unit for transmitting (Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022), to the application server system (the advertisement service interpreted as “the application service system”; Page 2, Paragraph 0021), a main content viewing request containing main content identification information for identifying main content and an sub content viewing request containing the received selected sub content specification information when connection with the application server system is established by the connection control system (Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022).

Regarding claim 22, the claim is interpreted and rejected for the same reason as set forth in claim 3.

Regarding claim 24, AARTS discloses wherein the sub content is advertisement content (advertisement information; Page 1, Paragraph 0005).

Regarding claim 25, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding claim 27, the claim is interpreted and rejected for the same reason as set forth in claim 19.

Regarding claim 28, the claim is interpreted and rejected for the same reason as set forth in claim 21.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 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 of this title, 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 negatived by the manner in which the invention was made.

7. Claims 4, 18, 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over AARTS in view of Tsuchiya. (Pub # US 2003/0105669 A1).

Regarding claim 4, AARTS teaches wherein: the selected sub content specification information transmission unit is configured to transmit (Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023), via the connection control system (an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021) to the user equipment which has transmitted the content delivery request (Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022); the selected sub content specification information reception unit is configured to receive information transmitted by the application server system (Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022); and the content viewing request transmission unit is configured to transmit (Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022) the main content viewing request and the sub content viewing request (Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service

containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022) to the application server system (the advertisement service interpreted as “the application service system”; Page 2, Paragraph 0021).

However, AARTS does not specifically disclose play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output; the play-list, based on the received play-list information.

In an analogous art, Tsuchiya teaches play-list information which is information containing the main content identification information contained in the content delivery request and the selected sub content specification information (the contents distribution processing unit (Fig. 11, element 1102) has a function for receiving information for specifying the contents selected by the member device 604, this information includes various prepared contents interpreted as “play-list information” and advertisement information; Page 7, Paragraphs 0145 - 0147), and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output (the contents distribution processing unit (Fig. 11, element 1102) receives a URL (Uniform Resource Locator) indicating the position for

storing a file of the contents, then, reading the file from the contents data recording unit (Fig. 11, element 1103), and transmitting an output of the file to the member device (Fig. 6, element 604); Page 7, Paragraph 0145); the play-list (various prepared contents interpreted as “play-list information”; Page 7, Paragraph 0147), based on the received play-list information (various prepared contents interpreted as “play-list information”; Page 7, Paragraph 0147).

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Tsuchiya with AARTS to improve the quality of the user's estimation information by appraising the estimation information of one user by another user (Tsuchiya: Page 1, Paragraph 0017).

Regarding claim 18, the claim is interpreted and rejected for the same reason as set forth in claim 4.

Regarding claim 20, the claim is interpreted and rejected for the same reason as set forth in claim 4.

Regarding claim 23, the claim is interpreted and rejected for the same reason as set forth in claim 4.

8. Claims 11 - 13, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over AARTS in view of Montpetit et al. (Pub # US 2007/0223523 A1 hereinafter Montpetit).

Regarding claim 11, AARTS teaches a content delivery system (a method of supplying advertising content; Page 1, Paragraph 0001) comprising an application server system (an advertisement service (Fig. 1, element 13); Page 2, Paragraph 0021)

and a connection control system (an authentication service (Fig. 1, element 0016); Page 2, Paragraph 0021), the connection control system for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information (the authentication service interpreted as “the connection control system" is configured to receive information corresponding to identified users in order to permit communication between the advertisement service and the user device (Fig. 1, element 10); Page 2, Paragraph 0021), the application server system comprising (the advertisement service interpreted as “the application service system”; Page 2, Paragraph 0021): a media functions part for transmitting content data representing content to the user equipment (Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023) with which the connection is established ((Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023); a service control functions part for controlling a service provided by the media functions part (an advertisement server is configured to retrieve advertisement information in accordance with the user information and transmit it to the user device ; Page 1, Paragraph 0013); and a user profile server functions part for storing profile information of a user of the user equipment (the user information store (Fig. 1, element 16a) comprise demographic information corresponding to the user; Page 1, Paragraph 0010), the media functions part comprising a content storage unit for

storing sub content data representing sub content and main content data representing main content (the advertisement service stores advertisement information in store (Fig. 1, element 13a), and may also track advertisement data sent to a particular user or device; Page 2, Paragraph 0021), the service control functions part comprising: a delivery request reception unit for receiving (the advertisement device is operable to receive a data request (Fig. 1, element 14); Page 2, Paragraph 0021) a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment content (the advertisement device is operable to receive a data request from the user device, said data request is transmitted in accordance with the metadata received in the content information; Page 2, Paragraphs 0021 - 0022); and an sub content selection unit for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content (Fig. 3, step 33 shows that the authentication service generates advertisement information in accordance with the received authentication information wherein an advertisement can be personalized to the user, such as age, gender, geographic information or any other information as appropriate; Page 2, Paragraph 0023) and preliminarily stored by the user profile server functions part (Fig. 2, step 21 shows that the user device receives data including content information from the content service; Page 2, Paragraph 0022), the service control functions part or the connection control system (the authentication service interpreted as “the connection control system"; Page 2, Paragraph 0021); and a selected sub content specification information transmission unit for transmitting selected

sub content specification information for specifying the selected sub content data to the user equipment which has transmitted the content delivery request (Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023).

However, AARTS does not specifically disclose comprising a core IMS (Internet Protocol Multimedia Subsystem) part, via the core IMS part.

In an analogous art, Montpetit teaches comprising a core IMS (Internet Protocol Multimedia Subsystem) part (the core network comprises an IP Multimedia Core Network Subsystem (IMS); Page 2, Paragraph 0018), via the core IMS part (the core network comprises an IMS; Page 2, Paragraph 0018).

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Montpetit with AARTS to provide network services and application customization (Montpetit: Page 1, Paragraph 0013).

Regarding claim 12, AARTS teaches wherein: the user equipment comprises (the user device interpreted as “user equipment"; Page 2, Paragraph 0021): a selected sub content specification information reception unit for receiving the selected sub content specification information transmitted by the service control functions part (Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022); and a content viewing request transmission unit for transmitting (Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022), to the media

functions part (the advertisement service interpreted as “the media functions part”; Page 2, Paragraph 0021), a main content viewing request containing the main content identification information and an sub content viewing request containing the received selected sub content specification information (Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022), when connection with the media functions part is established by (Fig. 3, step 31 shows that the advertisement service transmits an authentication request to the authentication server in order to establish connection with the advertisement service; Page 2, Paragraph 0023), and the media functions part comprises a content delivering unit for receiving the main content viewing request transmitted by the user equipment and transmitting to the user equipment main content data identified by the main content identification information contained in the received main content viewing request (the advertisement service receives a data request in the store (Fig. 1, element 13a) from the user device in accordance to the user's desired content transmitted by the authentication service, and at step 34 transmits the advertisement information to the user device 10; Page 2, Paragraphs 0021 - 0023), and for receiving the sub content viewing request transmitted by the user equipment and transmitting to the user equipment sub content data specified by the selected sub content specification information contained in the received sub content viewing request (Fig. 3, step 30 shows that the advertisement service receives the data

request from the user device, and at step 34 transmits the advertisement information to the user device; Page 2, Paragraph 0023).

However, AARTS does not specifically disclose the core IMS part.

In an analogous art, Montpetit teaches the core IMS part (the core network comprises an IP Multimedia Core Network Subsystem (IMS); Page 2, Paragraph 0018).

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Montpetit with AARTS to provide network services and application customization (Montpetit: Page 1, Paragraph 0013).

Regarding claim 13, AARTS discloses wherein the user equipment comprises a content outputting unit for receiving main content data and sub content data transmitted by the media functions part (Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service, and at step 24 generates an output; Page 2, Paragraph 0022), and outputting (at step 24 generates an output; Page 2, Paragraph 0022), based on the received main content data and sub content data (in accordance with the newly received content information interpreted as “the main content data” and advertisement information interpreted as “the sub content data”; Page 2, Paragraph 0022), viewing content in which sub content represented by the sub content data is inserted in main content represented by the main content data (the advertisement service generates advertisement information interpreted as “the sub content” in accordance with the user's desired content transmitted by the authentication service; Page 2, Paragraph 0023).

Regarding claim 26, the claim is interpreted and rejected for the same reason as set forth in claim 11.

9. Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over AARTS in view of Montpetit, and further in view of Tsuchiya.

Regarding claim 14, AARTS teaches wherein the selected sub content specification information transmission unit is configured to transmit (Fig. 3, step 34 shows that the advertisement service transmits the advertisement information to the user device; Page 2, Paragraph 0023), to the user equipment which has transmitted the content delivery request (Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022); the selected sub content specification information reception unit is configured to receive information transmitted by the service control functions part (Fig. 2, step 23 shows that the user device receives advertisement information from the advertisement service; Page 2, Paragraph 0022); and the content viewing request transmission unit is configured to transmit (Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service; Page 2, Paragraph 0022) the main content viewing request and the sub content viewing request (Fig. 2, step 22 shows that the user device transmits a data request to the advertisement service containing content data to be used in providing an output to the user and metadata to enable appropriate advertisement information; Page 2, Paragraph 0022) to the media functions part (the advertisement service ; Page 2, Paragraph 0021).

However, AARTS does not specifically disclose via the core IMS part.

In an analogous art, Montpetit teaches via the core IMS part (the core network comprises an IMS; Page 2, Paragraph 0018).

It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the technique of Montpetit with AARTS to provide network services and application customization (Montpetit: Page 1, Paragraph 0013).

However, the combination of AARTS and Montpetit does not specifically disclose play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output; the play-list, based on the received play-list information.

In an analogous art, Tsuchiya teaches play-list information that is information containing the main content identification information contained in the content delivery request and the selected sub content specification information (the contents distribution processing unit (Fig. 11, element 1102) has a function for receiving information for specifying the contents selected by the member device 604, this information includes various prepared contents interpreted as “play-list information” and advertisement information; Page 7, Paragraphs 0145 - 0147), and is information containing information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output (the contents distribution processing unit (Fig. 11,

element 1102) receives a URL (Uniform Resource Locator) indicating the position for storing a file of the contents, then, reading the file from the contents data recording unit (Fig. 11, element 1103), and transmitting an output of the file to the member device (Fig. 6, element 604); Page 7, Paragraph 0145); the play-list (various prepared contents interpreted as “play-list information”; Page 7, Paragraph 0147), based on the received play-list information (various prepared contents interpreted as “play-list information”; Page 7, Paragraph 0147).

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide the technique of Tsuchiya to the modified system of Montpetit with AARTS to improve the quality of the user's estimation information by appraising the estimation information of one user by another user (Tsuchiya: Page 1, Paragraph 0017).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATALI N. PASCUAL PEGUERO whose telephone number is (571)272-4691. The examiner can normally be reached on Monday - Friday 7:30am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, UN C. CHO can be reached on (571)272-7919. 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 http://pair-direct.uspto.gov. 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.

/NATALI N PASCUAL PEGUERO/
Examiner, Art Unit 2413

/UN C. CHO/
Supervisory Patent Examiner, Art Unit 2413

Notice of References Cited	Application/Control No. 13/129,756	Applicant(s)/Patent Under Reexamination TANIGUCHI ET AL.	
	Examiner NATALI N. PASCUAL [illegible]	Art Unit 2413	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2008/0256216 A1	10-2008	AARTS, Robert	709/217
*	B	US-2003/0105669 A1	06-2003	Tsuchiya, Atsushi	705/14
*	C	US-2007/0223523 A1	09-2007	Montpetit et al.	370/465
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
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	S					
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NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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	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.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	Art Unit
	NATALI N PASCUAL PEGUERO	2413

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

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/01/2013								
	1	✓								
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number	13129756
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Examiner Name	PASCUAL PEGUERO, NATALI
Attorney Docket Number	J-11-0248

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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U.S.PATENT APPLICATION PUBLICATIONS

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20020033844	A1	2002-03-21	LEVY KENNETH L et al.	Cited in ESR
	2	20070088838	A1	2007-04-19	LEVKOVITZ ZOHAR et al.	Cited in ESR

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Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(**Not for submission under 37 CFR 1.99**)

Application Number	13129756
Filing Date	2011-05-17
First Named Inventor	Kunihiro Taniguchi
Art Unit	~~4115~~ 2413
Examiner Name	PASCUAL PEGUERO, NATALI
Attorney Docket Number	J-11-0248

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	European search report for EP09827330.3 dated 2012-10-24	☐

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EXAMINER SIGNATURE

Examiner Signature	/Natali Pascual Peguero/	Date Considered	05/01/2013

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[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.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(**Not for submission under 37 CFR 1.99**)

Application Number	13129756
Filing Date	2011-05-17
First Named Inventor	Kunihiro Taniguchi
Art Unit	4115
Examiner Name	PASCUAL PEGUERO, NATALI
Attorney Docket Number	J-11-0248

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

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☒ See attached certification statement.

☐ Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☐ None

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	/Kelly G. Hyndman 39,234/	Date (YYYY-MM-DD)	2012-11-20
Name/Print	Kelly G. Hyndman	Registration Number	39234

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.**

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Content delivery system
US20110225270 --- US Applications --- 15-Sep-2011 --- ASAMI KAZUO
The system (1) includes an application server system (AP system) (4) and a connection control system (3). Based on equipment specification information transmitted by user equipment (2), the connection control system (3) establishes connection between the AP system (4) and the user equipment (2). The AP system (4)...

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System and method for ordering and delivering media content using supplementary data which is transmitted with a broadcast signal
AU2001290963A1 --- Australian Patent Documents --- 13-Jun-2002

System and method for ordering and delivering media content using supplementary data which is transmitted with a broadcast signal
AU2001290963B2 --- Australian Patent Documents --- 02-Nov-2006

System and method for ordering and delivering media content using supplementary data which is transmitted with a broadcast signal
AU2007200471A1 --- Australian Patent Documents --- 22-Feb-2007

Method and apparatus for sharing internet content
US20050198317 --- US Applications --- 08-Sep-2005
A method for sharing content over a network is provided. According to the method, a plurality of requests (200) for receiving content are received by a server (102) from user terminals (106). And, announcements of content or playlists (206, 214) that are to be broadcast are received from broadcast devices (108). The...

Contents delivery management apparatus and contents delivery management method
US20060085846 --- US Applications --- 20-Apr-2006 --- NTT DOCOMO INC
Provided are a contents delivery management apparatus and a contents delivery management method capable of appropriately charging users, independent of stability of a network. A contents delivery management apparatus is configured to delete a one-time password checked upon delivery of contents, in conjunction with the...

Contents distributing system, device for processing charge for advertisement information, contents distributing server, their program, and program recording medium
US20030105669 --- US Applications --- 05-Jun-2003 --- Sony Corporation
A contents distributing system for distributing advertisement information simultaneously with the distribution of contents includes a communication network, a contents distributing server connected to the communication network, an advertisement charge processing device connectable to the contents distributing server,...

Systems and Methods of Network Operation and Information Processing, Including Data Acquisition, Processing and Provision and/or Interoperability Features
US20060263833 --- US Applications --- 23-Oct-2006 --- SHAH NITIN
According to some embodiments of the present invention, a system, apparatus and method of network operation and information processing, including data acquisition, data processing, data provision, and/or data interoperability features is presented. In some exemplary embodiments, the method includes registering users...

Apparatus, Systems and Methods for Targeted Content Delivery
US20060235951 --- US Applications --- 26-Sep-2006 --- FEEVA TECHNOLOGY, INC.
According to some embodiments of the present invention, a system, apparatus and method for targeted content delivery is presented. In some embodiments, the method comprises registering users logging-on to a computer network and gathering user-related information from users. Location-centric information for each user...

Method for content delivery without complicated viewers countermeasure and a system therefor
US20070079347 --- US Applications --- 05-Apr-2007 --- Oki Electric Industry Co., Ltd.

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Refine Search

A service delivery system includes a set-top box, a card reader and a monitor as a user terminal system. In the set-top box, a card reader unit reads out information from a card to store the information read out temporarily in a memory. An authenticator authenticates key information permitting contents delivery and

Method of supplying advertising content
US20060256216 --- US Applications --- 16-Oct-2006 --- HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P.
A method of supplying advertising content, a method comprising the steps of receiving content data, the data comprising metadata identifying an advertisement service, transmitting a data request to the advertisement service in accordance with the metadata, transmitting an authentication request to an authentication...

Methods for sending and receiving content and system for delivering content through use of e-mail or the like
US20020065748 --- US Applications --- 30-May-2002
An information receiving terminal notifies an information distribution server of a request for delivery of content. This delivery request specifies a category of the content, a delivery validity period and a character string in a subject header of an e-mail to be delivered. The information distribution server selects...

Systems and Method of Network Operation and Information Processing, Including Data Acquisition, Processing and Provision, Including Data Acquisition, Processing and Provision and/or Interoperability Features
US20060262901 --- US Applications --- 23-Oct-2006 --- FEEVA TECHNOLOGY, INC.
According to some embodiments of the present invention, a system (100), apparatus and method of network operation and information processing, including data acquisition, data processing, data provision, and/or data interoperability features is presented. In some exemplary embodiments, the method includes registering...

Content delivering system, server, and content delivering method
US20060201484 --- US Applications --- 21-Aug-2006 --- FUJITSU LTD
A receiver receives from a client, a participation request indicating that a delivery of a content is desired. An affiliated group-determining unit determines of which group corresponding to the attribute content the attribute of the user, included in the participation request is affiliated. When the other client

System and method for providing contents on a network
US20020010756 --- US Applications --- 24-Jan-2002
Disclosed is a contents-providing system for receiving contents from a web server and providing the contents to a portable terminal connected via a network that comprises: a user information database for storing user ID information; an authentication server for performing authentication based upon the user ID...

Ensuring reliable delivery of interactive content
AU2001234861B2 --- Australian Patent Documents --- 30-Jun-2005

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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	40211	(Nec near2 Corporation).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:26
L2	21	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:28
L3	2	L2 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:28
L4	173	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
L5	2	L4 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
L6	36	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
L7	2	L6 and ((application near2 server) and (sub near2 content)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:29
L8	908	(Application near2 server) and (connection near2 control) and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:34
L9	502	@ad< "20081118" and L8	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:35
L10	235	L9 and ((user near2 (device or equipment)) and (storage) and (user near2 information))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:36
L11	19	L10 and 709/219,217.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
L12	5409367	(content delivery system).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37

L13	2	L12 and L5	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:37
L14	702	L8 and (delivery)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:38
L15	44	L14 and 709/219,217.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:38
S1	1	"13129756"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 12:02
S2	2	"20110225270"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 12:22
S4	4	"2008022298"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/22 15:13
S6	1	"12099489"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 15:55
S7	4	"10287835"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 16:29
S8	2	"20030105669"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/23 16:30
S16	2639	((core near2 IMS) or (core near2 (Internet adj Protocol adj Multimedia adj Subsystem)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:56
S17	1275	@ad< "20081118" and S16	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:57
S18	67	S17 and (advertisement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:57
S19	60	S18 and (user near2 (device or equipment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 16:58
S23	20	S19 and "370".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:01
S24	20	S16 and S23	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2013/04/30 17:02

			IBM_TDB			
S25	18	S19 and "709".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 17:07
S26	1	"13063122"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/30 21:21
S32	21	((KAZUSHIGE) near2 (ISHIKAWA)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:17
S33	173	((KAZUO) near2 (ASAMI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:18
S34	36	((KUNIHIRO) near2 (TANIGUCHI)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:18
S36	10	("20030105669" | "20020033844" | "20070223523" | "20070088838" | "20080256216").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/05/01 23:24

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CONFIRMATION NO. 1971

SERIAL NUMBER	FILING or 371(c) DATE RULE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
13/129,756	05/17/2011	709	2413	J-11-0248

APPLICANTS

Kunihiro Taniguchi, Tokyo, JAPAN;
Kazushige Ishikawa, Tokyo, JAPAN;
Kazuo Asami, Tokyo, JAPAN;

**** CONTINUING DATA ***************************

This application is a 371 of PCT/JP2009/006140 11/17/2009

**** FOREIGN APPLICATIONS ***************************

JAPAN 2008294270 11/18/2008

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Foreign Priority claimed	☑ Yes ☐ No	☐ Met after Allowance	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
35 USC 119(a-d) conditions met	☑ Yes ☐ No		JAPAN	20	28	9
Verified and Acknowledged	/NATALI PASCUAL PEGUERO/ Examiner's Signature	Initials				

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IRVING, TX 75039
UNITED STATES

TITLE

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Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13129756	TANIGUCHI ET AL.
	Examiner	Art Unit
	NATALI N PASCUAL PEGUERO	2413

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SEARCH NOTES		
Search Notes	Date	Examiner
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IP.com Patent Search	5/1/2013	NP

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/NATALI N PASCUAL PEGUERO/ Examiner.Art Unit 2413	

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PTO/SB/08a (01-09)
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Application Number	13129756
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First Named Inventor	KUNIHIRO TANIGUCHI
Art Unit	2413
Examiner Name	Natali Pascual Peguero
Attorney Docket Number	J-11-0248

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	1	2008153896	JP	A	2008-07-03		CITED IN SPECIFICATION	☐
	2	2007105568	WO	A	2007-09-20		CITED IN ISR	☐
	3	2008022298	JP	A	2008-01-31		CITED IN ISR	☐

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Peloton Ex-1002, Page 872
IPR2023-01241 (Peloton v. NEC)

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	Art Unit	2413
	Examiner Name	Natali Pascual Peguero
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	4	2006191594	JP	A	2006-07-20		CITED IN ISR	☐

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Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	INTERNATIONAL SEARCH REPORT for PCT/JP2009/006140 mailed February 16, 2010	☐

If you wish to add additional non-patent literature document citation information please click the Add button

EXAMINER SIGNATURE

Examiner Signature	/Natali Pascual Peguero/	Date Considered	05/01/2013

*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.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH./N.P./

Peloton - Ex. 1002, Page 873
IPR2023-01241 (Peloton v. NEC)

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
13/129,756	05/17/2011	Kunihiro Taniguchi	J-11-0248

CONFIRMATION NO. 1971

POA ACCEPTANCE LETTER

71799
Mr. Jackson Chen
6535 N. STATE HWY 161
IRVING, TX 75039

OC000000057980855

Date Mailed: 12/11/2012

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 11/16/2012.

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.

/snguyen/

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

PTO/SB/08a (01-09)
Approved for use through 02/28/2009. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	13129756
Filing Date	2011-05-17
First Named Inventor	Kunihiro Taniguchi
Art Unit	4115
Examiner Name	PASCUAL PEGUERO, NATALI
Attorney Docket Number	J-11-0248

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
	1					

If you wish to add additional U.S. Patent citation information please click the Add button.

U.S.PATENT APPLICATION PUBLICATIONS

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20020033844	A1	2002-03-21	LEVY KENNETH L et al.	Cited in ESR
	2	20070088838	A1	2007-04-19	LEVKOVITZ ZOHAR et al.	Cited in ESR

If you wish to add additional U.S. Published Application citation information please click the Add button.

FOREIGN PATENT DOCUMENTS

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							☐

If you wish to add additional Foreign Patent Document citation information please click the Add button

NON-PATENT LITERATURE DOCUMENTS

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(**Not for submission under 37 CFR 1.99**)

Application Number	13129756
Filing Date	2011-05-17
First Named Inventor	Kunihiro Taniguchi
Art Unit	4115
Examiner Name	PASCUAL PEGUERO, NATALI
Attorney Docket Number	J-11-0248

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	European search report for EP09827330.3 dated 2012-10-24	☐

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	13129756
Filing Date	2011-05-17
First Named Inventor	Kunihiro Taniguchi
Art Unit	4115
Examiner Name	PASCUAL PEGUERO, NATALI
Attorney Docket Number	J-11-0248

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.

☐ Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☐ None

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	/Kelly G. Hyndman 39,234/	Date (YYYY-MM-DD)	2012-11-20
Name/Print	Kelly G. Hyndman	Registration Number	39234

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 record s.

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.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

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.

Docket No. J-11-0248

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:	Kunihiro Taniguchi
Application No.: 13/129,756	Art Unit: 4115
Filed: 05-17-2011	Examiner: PASCUAL PEGUERO, NATALI
	Confirmation Number: 1971

For: CONTENT DELIVERY SYSTEM

INFORMATION DISCLOSURE STATEMENT WITH CERTIFICATION UNDER 37 C.F.R. § 1.704(d)

I hereby certify that each item of information contained in the co-filed information disclosure statement was first cited in a communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 CFR 1.56(c) more than thirty (30) days prior to the filing of the co-filed information disclosure statement.

Respectfully submitted,

/Kelly G. Hyndman 39,234/
Kelly G. Hyndman
Reg. No. 39,234

November 20, 2012

Sughrue Mion, PLLC
2100 Pennsylvania Ave., N.W.
Washington,DC 20037
Telephone: 202-775-7585
Facsimile: 202-293-2483

Electronic Acknowledgement Receipt

EFS ID:	14278411
Application Number:	13129756
International Application Number:	
Confirmation Number:	1971
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	Kunihiro Taniguchi
Customer Number:	71799
Filer:	Kelly G. Hyndman/Andrew Annis
Filer Authorized By:	Kelly G. Hyndman
Attorney Docket Number:	J-11-0248
Receipt Date:	20-NOV-2012
Filing Date:	17-MAY-2011
Time Stamp:	15:17:00
Application Type:	U.S. National Stage under 35 USC 371

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)	IDS_SB_08.pdf	64463 dd237c5d95a38d019d8cdbeb9935cf7960a55ebf	no	4

Warnings:	
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This is not an USPTO supplied IDS fillable form					
2	Transmittal Letter	IDS_Statement.pdf	12285 3b673e0e821b9475dbe15e79b71ccfdcba4888d2	no	1
Warnings:					
Information:					
3	Non Patent Literature	ESR.pdf	1135972 2852fa5ac625dfdb32463d5a8037a1d4aa679bcc	no	7
Warnings:					
Information:					
			Total Files Size (in bytes):	1212720	

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.

OPAP
NOV 16 2012
IAP28
PATENT & TRADEMARK OFFICE

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Kunihiro Taniguchi

Docket No: J-11-0248

Appln. No.: 13/129,756

Filed: 5/17/2011

TRANSMITTAL OF REVOCATION OF POWER OF ATTORNEY AND APPOINTMENT OF NEW ATTORNEYS BY ASSIGNEE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant hereby submits a Revocation and Power of Attorney and Appointment of New Attorneys by Assignee, and exhibit referenced therein, ("Power of Attorney") in the above-identified application.

The Power of Attorney includes a statement under 37 C.F.R. §3.73(b), signed by a person authorized to act on behalf of the assignee, specifying where documentary evidence of a chain of title from the original owner to the assignee is recorded in the assignment records of the Office. Specifically, the reel and frame number in the Office's assignment records for the present application are set forth in the exhibit attached to and referenced by the Power of Attorney. For the convenience of the Office, such reel and frame number, as well as the application number, are set forth below.

USSN: 13129756

Reel / Frame: 026343 / 0023

Please direct all subsequent correspondence to the address associated with Customer Number 71799.

Respectfully submitted,

/J. Warren Lytle, Jr./

J. Warren Lytle, Jr.
Registration No. 39,283

SUGHRUE MION, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

Date: November 16, 2012

OPAP
NOV 16 2012
IAP28
PATENT & TRADEMARK OFFICE

REVOCATION OF POWER OF ATTORNEY AND APPOINTMENT OF NEW ATTORNEYS BY ASSIGNEE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

NEC CORPORATION., states that it is the assignee of record of the entire right, title, and interest in each of the U.S. patent applications listed in the attached Exhibit ("Applications") by virtue of an assignment recorded in the U.S. Patent and Trademark Office at the reel and frame number indicated in the Exhibit, and hereby revokes all prior powers of attorney and authorizations of agent given in the Applications and appoints all Practitioners who are associated with the USPTO Customer Number provided below as its attorneys or agents to prosecute each of the Applications and to transact all business in the United States Patent and Trademark Office connected therewith, recognizing that the specific attorneys listed under this USPTO Customer Number may be changed from time to time at the sole discretion of NEC CORPORATION.

NEC CORPORATION requests all correspondence for the Application be addressed to the address associated with the same USPTO Customer Number.

71799
CUSTOMER NUMBER

The undersigned is authorized to act on behalf of the assignee.

Respectfully submitted,

July 27, 2012
Date

Ryoichi Harada
Signature

Ryoichi Harada
Typed or Printed Name

Manager
NEC Intellectual Property Center, America
NEC Corporation of America
Title and Company

9235450-1

OPAP
PATENT & TRADEMARK OFFICE
NOV 16 2012
1428

Docket #	USSN	US Filing Date	First Named Inventor	Reel	Frame	Assignee 1
J-11-0241	13/129,335	May 13, 2011	Fujio Okumura	026281	0273	NEC CORPORATION
J-11-0242	13/129,336	May 13, 2011	Motoki Morita	026281	0288	NEC CORPORATION
J-11-0239	13/129,338	May 13, 2011	Takashi Takeuchi	026281	0216	NEC CORPORATION
J-11-0240	13/129,339	May 13, 2011	Takahiro Nobukiyo	026281	0243	NEC CORPORATION
J-11-0243	13/129,340	May 13, 2011	Kazunori Ozawa	026281	0311	NEC CORPORATION
J-11-0244	13/129,341	May 13, 2011	Masahiro Tanomura	026281	0321	NEC CORPORATION
J-11-0245	13/129,342	May 13, 2011	Yukitaka Kusumura	026281	0344	NEC CORPORATION
J-11-0246	13/129,344	May 13, 2011	Yasuhiro Hamada	026281	0373	NEC CORPORATION
J-11-0247	13/129,345	May 13, 2011	Atsufumi Shibayama	026281	0402	NEC CORPORATION
J-11-0250	13/129,755	May 17, 2011	Masaki Umayabashi	026343	0223	NEC CORPORATION
J-11-0248	13/129,756	May 17, 2011	Kunihiro Taniguchi	026343	0023	NEC CORPORATION
J-11-0249	13/129,757	May 17, 2011	Masatsugu Matsuura	026343	0144	NEC CORPORATION
J-11-0251	13/129,759	May 17, 2011	Masahito Shinohara	026343	0633	NEC CORPORATION
J-11-0258	13/130,675	May 23, 2011	Risato Ohhira	026344	0279	NEC CORPORATION
J-11-0259	13/130,676	May 23, 2011	Takao Morimoto	026344	0310	NEC CORPORATION
J-11-0260	13/130,948	June 21, 2011	Toshihide Kuwabara	026511	0400	NEC CORPORATION
J-11-0261	13/130,949	May 24, 2011	Takashi Torii	026344	0333	NEC CORPORATION
J-11-0262	13/130,950	May 24, 2011	Michinari Momma	026344	0362	NEC CORPORATION
J-11-0263	13/130,951	June 15, 2011	Suguri Nakada	026511	0460	NEC CORPORATION
J-11-0274	13/132,476	June 22, 2011	Takuya Murakami	026422	0954	NEC CORPORATION
J-11-0275	13/132,480	June 2, 2011	Tadayoshi Inumaru	026422	0956	NEC CORPORATION
J-11-0266	13/132,481	June 2, 2011	Yoshinori Hama	026422	0627	NEC CORPORATION
J-11-0271	13/132,484	June 2, 2011	Norihiko Omuro	026422	0876	NEC CORPORATION
J-11-0272	13/132,487	June 2, 2011	Masahi Hasegawa	026422	0915	NEC CORPORATION
J-11-0273	13/132,489	June 2, 2011	Masaki Kitsunezuke	026422	0948	NEC CORPORATION
J-11-0283	13/133,031	June 6, 2011	Nobuki Kajihara	026423	0124	NEC CORPORATION
J-11-0276	13/133,098	June 6, 2011	Makoto Tsuruno	026422	0994	NEC CORPORATION

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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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
13/129,756	05/17/2011	Kunihiro Taniguchi	J-11-0248

CONFIRMATION NO. 1971

IMPROPER CPOA LETTER

71799
Mr. Jackson Chen
6535 N. STATE HWY 161
IRVING, TX 75039

OC000000057215100

Date Mailed: 10/24/2012

NOTICE REGARDING POWER OF ATTORNEY

This is in response to the power of attorney filed 10/01/2012. The power of attorney in this application is not accepted for the reason(s) listed below:

- The power of attorney is from an assignee and the statement required by 37 CFR 3.73(c) has not been received.
- The power of attorney you provided did not comply with the power of attorney rules that became effective on June 25, 2004. See 37 CFR 1.32 and 69 Fed. Reg. 29865.

/agizaw/

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

Peloton - Ex. 1002, Page 885
IPR2023-01241 (Peloton v. NEC)



TFW

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Kunihiro Taniguchi

Docket No: J-11-0248

Appln. No.: 13/129,756

Filed: 5/17/2011

TRANSMITTAL OF REVOCATION OF POWER OF ATTORNEY AND APPOINTMENT OF NEW ATTORNEYS BY ASSIGNEE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant hereby submits a Revocation and Power of Attorney and Appointment of New Attorneys by Assignee, and exhibit referenced therein, ("Power of Attorney") in the above-identified application.

The Power of Attorney includes a statement under 37 C.F.R. §3.73(b), signed by a person authorized to act on behalf of the assignee, specifying where documentary evidence of a chain of title from the original owner to the assignee is recorded in the assignment records of the Office. Specifically, the reel and frame number in the Office's assignment records for the present application are set forth in the exhibit attached to and referenced by the Power of Attorney. For the convenience of the Office, such reel and frame number, as well as the application number, are set forth below.

USSN: 13129756

Reel / Frame: 026343 / 0023

Please direct all subsequent correspondence to the address associated with Customer Number 71799.

Respectfully submitted,

/J. Warren Lytle, Jr./

J. Warren Lytle, Jr.
Registration No. 39,283

SUGHRUE MION, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

Date: October 1, 2012

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
13/129,756	05/17/2011	Kunihiro Taniguchi	J-11-0248

CONFIRMATION NO. 1971

71799
Mr. Jackson Chen
6535 N. STATE HWY 161
IRVING, TX 75039

PUBLICATION NOTICE



Title:CONTENT DELIVERY SYSTEM

Publication No.US-2011-0225270-A1
Publication Date:09/15/2011

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 publically 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 Office of Public Records. The Office of Public Records can be reached by telephone at (703) 308-9726 or (800) 972-6382, by facsimile at (703) 305-8759, by mail addressed to the United States Patent and Trademark Office, Office of Public Records, 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 http://pair.uspto.gov/. 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 Managment, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

Peloton - Ex. 1002, Page 887
IPR2023-01241 (Peloton v. NEC)

MULTIPLE DEPENDENT CLAIM FEE CALCULATION SHEET

Substitute for Form PTO-1360
(For use with Form PTO/SB/06)

Application Number	Filing Date
13129756	

Applicant(s) KUNIHIRO TANIGUCHI

* May be used for additional claims or amendments

CLAIMS	AS FILED		AFTER FIRST AMENDMENT		AFTER SECOND AMENDMENT			*		*		*	
	Indep	Depend	Indep	Depend	Indep	Depend		Indep	Depend	Indep	Depend	Indep	Depend
1	1		1				51						
2		1		1			52						
3		2		1			53						
4		(1)		1			54						
5		(1)		1			55						
6		(1)		1			56						
7		(1)		1			57						
8		(1)		1			58						
9		(1)		1			59						
10		(1)		1			60						
11	1		1				61						
12		1		1			62						
13		2		1			63						
14		(1)		1			64						
15	1		1				65						
16		1		1			66						
17		2		1			67						
18		(1)		1			68						
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46							96						
47							97						
48							98						
49							99						
50							100						
Total Indep	5		9		0								
Total Depend	22	↵	19	↵	0	↵							
Total Claims	27		28		0								

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 13/129,756

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY FEE($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	330
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	430
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	220
TOTAL CLAIMS (37 CFR 1.16(i))	28 minus 20 =	* 8			OR	x 52 =	416
INDEPENDENT CLAIMS (37 CFR 1.16(h))	9 minus 3 =	* 6				x 220 =	1320
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $270 ($135 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
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	2716

APPLICATION AS AMENDED - PART II

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT A	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT B	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	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.

UNITED STATES PATENT AND TRADEMARK OFFICE

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

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
13/129,756	Kunihiro Taniguchi	J-11-0248

71799
Mr. Jackson Chen
6535 N. STATE HWY 161
IRVING, TX 75039

INTERNATIONAL APPLICATION NO.	
PCT/JP2009/006140	
I.A. FILING DATE	PRIORITY DATE
11/17/2009	11/18/2008

CONFIRMATION NO. 1971
371 ACCEPTANCE LETTER

OC000000048035803

Date Mailed: 06/07/2011

NOTICE OF ACCEPTANCE OF APPLICATION UNDER 35 U.S.C 371 AND 37 CFR 1.495

The applicant is hereby advised that the United States Patent and Trademark Office in its capacity as a Designated / Elected Office (37 CFR 1.495), has determined that the above identified international application has met the requirements of 35 U.S.C. 371, and is ACCEPTED for national patentability examination in the United States Patent and Trademark Office.

The United States Application Number assigned to the application is shown above and the relevant dates are:

05/17/2011	05/18/2011
DATE OF RECEIPT OF 35 U.S.C. 371(c)(1), (c)(2) and (c)(4) REQUIREMENTS	DATE OF COMPLETION OF ALL 35 U.S.C. 371 REQUIREMENTS

A Filing Receipt (PTO-103X) will be issued for the present application in due course. **THE DATE APPEARING ON THE FILING RECEIPT AS THE " FILING DATE" IS THE DATE ON WHICH THE LAST OF THE 35 U.S.C. 371 (c)(1), (c)(2) and (c)(4) REQUIREMENTS HAS BEEN RECEIVED IN THE OFFICE. THIS DATE IS SHOWN ABOVE.** *The filing date of the above identified application is the international filing date of the international application (Article 11(3) and 35 U.S.C. 363).* Once the Filing Receipt has been received, send all correspondence to the Group Art Unit designated thereon.

The following items have been received:

- Copy of the International Application filed on 05/17/2011
- English Translation of the IA filed on 05/17/2011
- Copy of the International Search Report filed on 05/17/2011
- Preliminary Amendments filed on 05/17/2011
- Information Disclosure Statements filed on 05/19/2011
- Oath or Declaration filed on 05/17/2011
- U.S. Basic National Fees filed on 05/17/2011
- Priority Documents filed on 05/17/2011

Peloton - Ex. 1002, Page 890
IPR2023-01241 (Peloton v. NEC)

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

SHELBY J MILLER

Telephone: (571) 272-0384

Peloton - Ex. 1002, Page 891
IPR2023-01241 (Peloton v. NEC)

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	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
13/129,756	05/17/2011		2716	J-11-0248	28	9

CONFIRMATION NO. 1971

71799
Mr. Jackson Chen
6535 N. STATE HWY 161
IRVING, TX 75039

FILING RECEIPT

OC000000048035802

Date Mailed: 06/07/2011

Receipt is acknowledged of this non-provisional 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 APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Applicant(s)

Kunihiro Taniguchi, Tokyo, JAPAN;
Kazushige Ishikawa, Tokyo, JAPAN;
Kazuo Asami, Tokyo, JAPAN;

Power of Attorney: The patent practitioners associated with Customer Number 71799

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/JP2009/006140 11/17/2009

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 2008294270 11/18/2008

If Required, Foreign Filing License Granted: 06/03/2011

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 13/129,756**

Projected Publication Date: 09/15/2011

Non-Publication Request: No

Early Publication Request: No

Peloton - Ex. 1002, Page 892
IPR2023-01241 (Peloton v. NEC)

Title

CONTENT DELIVERY SYSTEM

Preliminary Class

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

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.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

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.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

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PTO/SB/08a (01-09)
Approved for use through 02/28/2009. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	13129756
Filing Date	2011-05-17
First Named Inventor	KUNIHIRO TANIGUCHI
Art Unit	
Examiner Name	
Attorney Docket Number	J-11-0248

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
	1					

If you wish to add additional U.S. Patent citation information please click the Add button.

U.S.PATENT APPLICATION PUBLICATIONS

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button.

FOREIGN PATENT DOCUMENTS

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	2008153896	JP	A	2008-07-03		CITED IN SPECIFICATION	☐
	2	2007105568	WO	A	2007-09-20		CITED IN ISR	☐
	3	2008022298	JP	A	2008-01-31		CITED IN ISR	☐

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13129756
	Filing Date	2011-05-17
	First Named Inventor	KUNIHIRO TANIGUCHI
	Art Unit	
	Examiner Name	
	Attorney Docket Number	J-11-0248

	4	2006191594	JP	A	2006-07-20		CITED IN ISR	☐

If you wish to add additional Foreign Patent Document citation information please click the Add button

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	INTERNATIONAL SEARCH REPORT for PCT/JP2009/006140 mailed February 16, 2010	☐

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	13129756
Filing Date	2011-05-17
First Named Inventor	KUNIHIRO TANIGUCHI
Art Unit	
Examiner Name	
Attorney Docket Number	J-11-0248

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.

☐ Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ None

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	/Jackson Chen/	Date (YYYY-MM-DD)	2011-05-18
Name/Print	Jackson Chen	Registration Number	36,104

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.**

Electronic Acknowledgement Receipt

EFS ID:	10115103
Application Number:	13129756
International Application Number:	
Confirmation Number:	1971
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	KUNIHIRO TANIGUCHI
Customer Number:	71799
Filer:	Jackson Chen/KEN SATO
Filer Authorized By:	Jackson Chen
Attorney Docket Number:	J-11-0248
Receipt Date:	19-MAY-2011
Filing Date:	
Time Stamp:	14:47:59
Application Type:	U.S. National Stage under 35 USC 371

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	Foreign Reference	JP2006191594.pdf	6359085 3250a4149c2d68c6aefc9085f1d26b8782c3b07f	no	22

Warnings:	
Information:	

2	Foreign Reference	JP2008022298.pdf	7123112 2767abd303b064824fa12208152601c7d8e6b285	no	29
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Information:					
3	Foreign Reference	JP2008153896.pdf	5256676 b2511ee26d34b2b53ea5269efd70d191e7793bb4	no	19
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4	Foreign Reference	WO2007105568.pdf	16192015 89c26e13af66bef8cd04085685ee8b255785e92e	no	61
Warnings:					
Information:					
5		J-11-0248_IDS.pdf	538847 9a2b8e32b37e3624cea2d1bba539c4f202441a4e	yes	3

Multipart Description/PDF files in .zip description

Document Description	Start	End
Information Disclosure Statement (IDS) Filed (SB/08)	1	2
Transmittal Letter	3	3

Warnings:	
Information:	
Total Files Size (in bytes):	35469735

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.

Docket No. J-11-0248

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Kunihiro TANIGUCHI et al.

Application No.: Not Yet Assigned | Art Unit: Not Yet Assigned

Filed: Not Yet Assigned | Examiner: Not Yet Assigned

For: CONTENT DELIVERY SYSTEM

PRELIMINARY AMENDMENT

MAIL STOP AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Prior to examination on the merits, please amend the above-identified U.S. patent application as follows:

Amendments to the Specification are reflected on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 3 of this paper.

Remarks/Arguments are on page 20 of this paper.

Peloton - Ex. 1002, Page 900
IPR2023-01241 (Peloton v. NEC)

REMARKS

Entry of the above amendment is earnestly solicited. An early and favorable first action on the merits is earnestly requested.

Respectfully submitted,

/Jackson Chen/

Jackson Chen
Registration No. 36,104
NEC Corporation of America
Intellectual Asset Center, America
6535 N. State Highway 161 Irving, Texas 75039
Telephone: (214) 262-3763
Facsimile: (214) 262-3731

Peloton - Ex. 1002, Page 901
IPR2023-01241 (Peloton v. NEC)

Fig.1

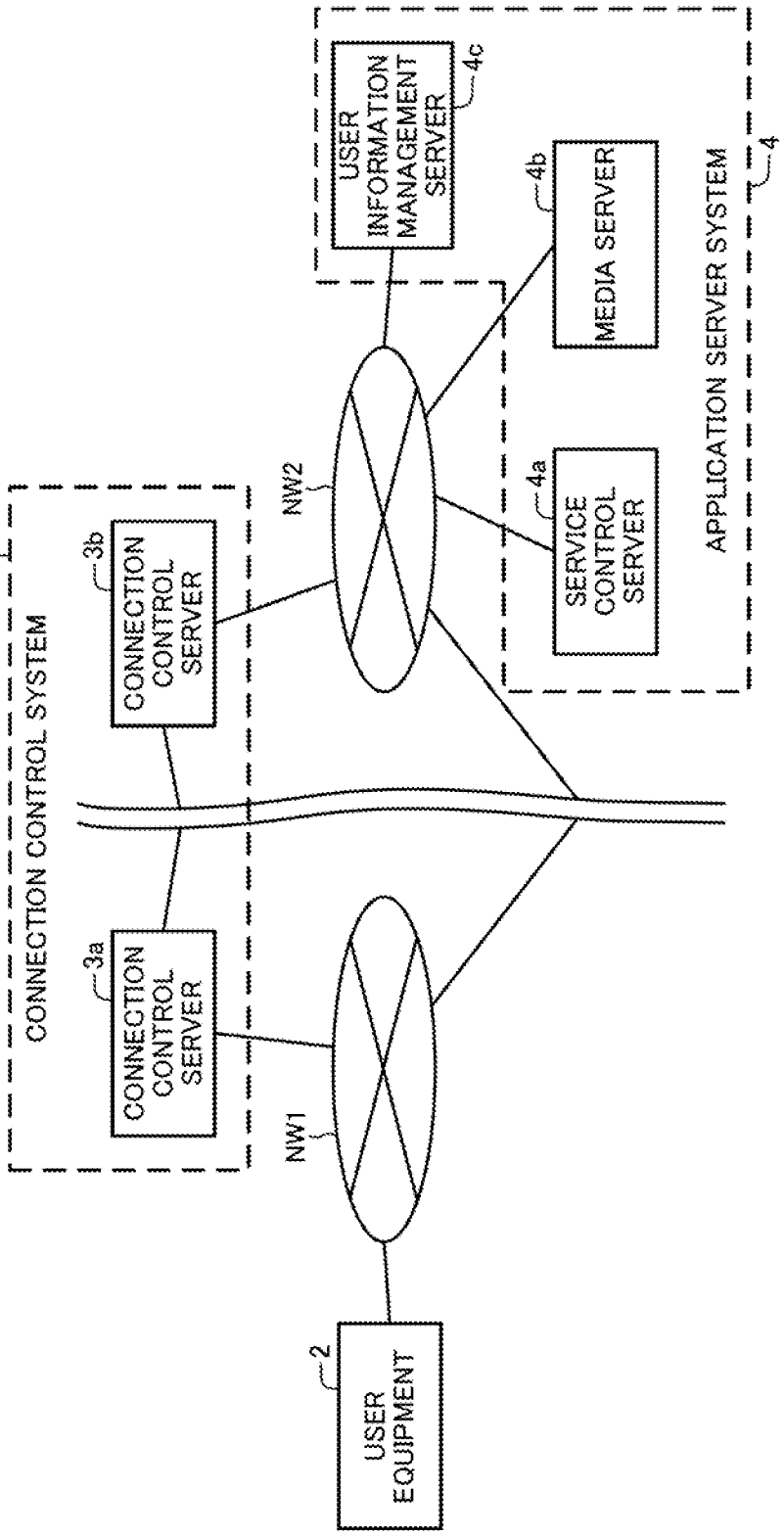

1
USER EQUIPMENT
2
NW1
NW2
CONNECTION CONTROL SYSTEM
3
CONNECTION CONTROL SERVER
3a
CONNECTION CONTROL SERVER
3b
APPLICATION SERVER SYSTEM
4
SERVICE CONTROL SERVER
4a
MEDIA SERVER
4b
USER INFORMATION MANAGEMENT SERVER
4c

Fig.2

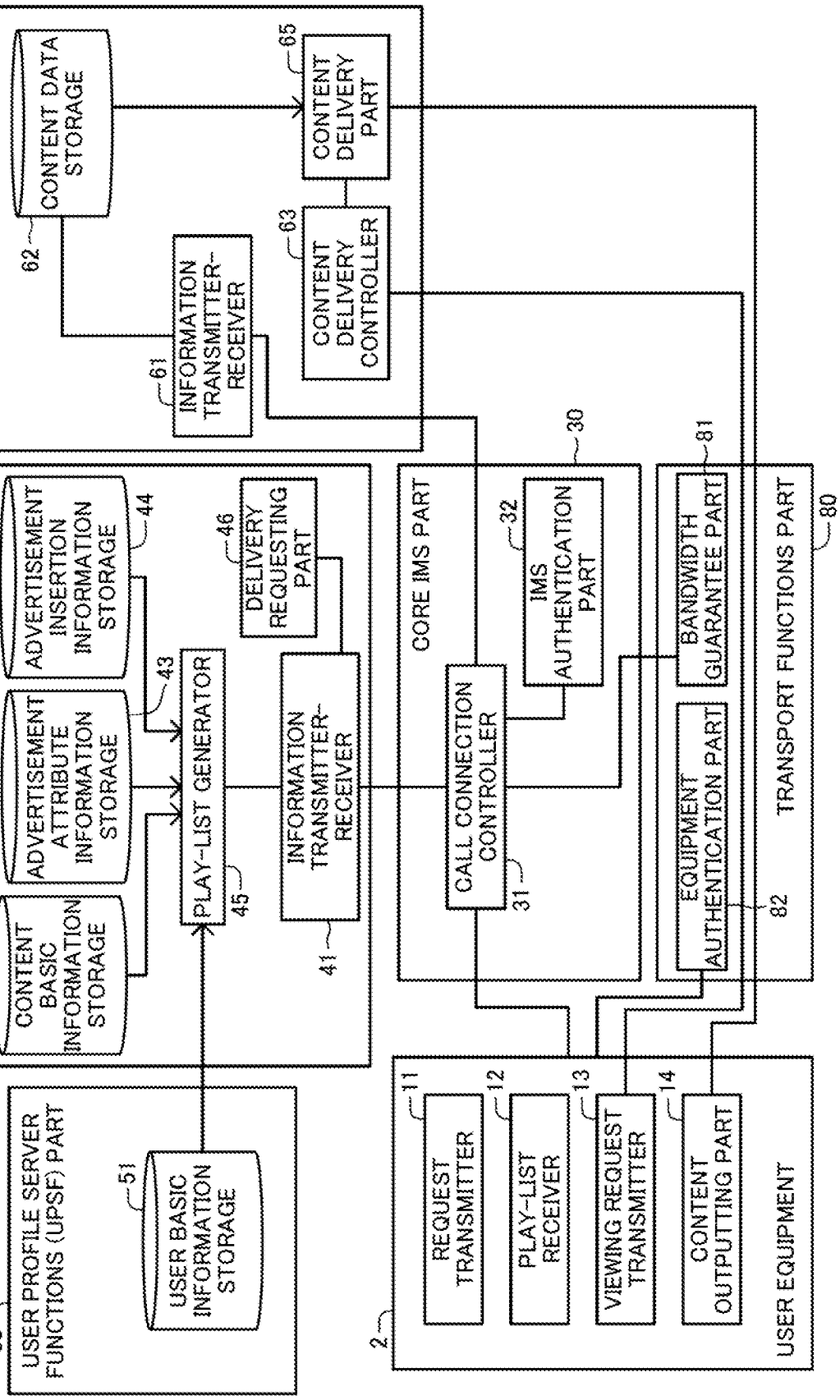

MEDIA FUNCTIONS (MF) PART
60
CONTENT DATA STORAGE
62
CONTENT DELIVERY PART
65
INFORMATION TRANSMITTER-RECEIVER
61
CONTENT DELIVERY CONTROLLER
63
SERVICE CONTROL FUNCTIONS (SCF) PART
40
ADVERTISEMENT INSERTION INFORMATION STORAGE
44
ADVERTISEMENT ATTRIBUTE INFORMATION STORAGE
43
CONTENT BASIC INFORMATION STORAGE
42
PLAY-LIST GENERATOR
45
DELIVERY REQUESTING PART
46
INFORMATION TRANSMITTER-RECEIVER
41
CORE IMS PART
CALL CONNECTION CONTROLLER
31
IMS AUTHENTICATION PART
32
30
TRANSPORT FUNCTIONS PART
80
BANDWIDTH GUARANTEE PART
81
EQUIPMENT AUTHENTICATION PART
82
USER PROFILE SERVER FUNCTIONS (UPSF) PART
50
USER BASIC INFORMATION STORAGE
51
USER EQUIPMENT
2
REQUEST TRANSMITTER
11
PLAY-LIST RECEIVER
12
VIEWING REQUEST TRANSMITTER
13
CONTENT OUTPUTTING PART
14

Fig.3

ADVERTISEMENT ATTRIBUTE INFORMATION	PRIORITY INFORMATION
CAR	1
REAL ESTATE	2
TRAVEL	4
INSURANCE	5
CELL-PHONE	3
COFFEE	3
GADGET	4
⋮	⋮

Fig.4

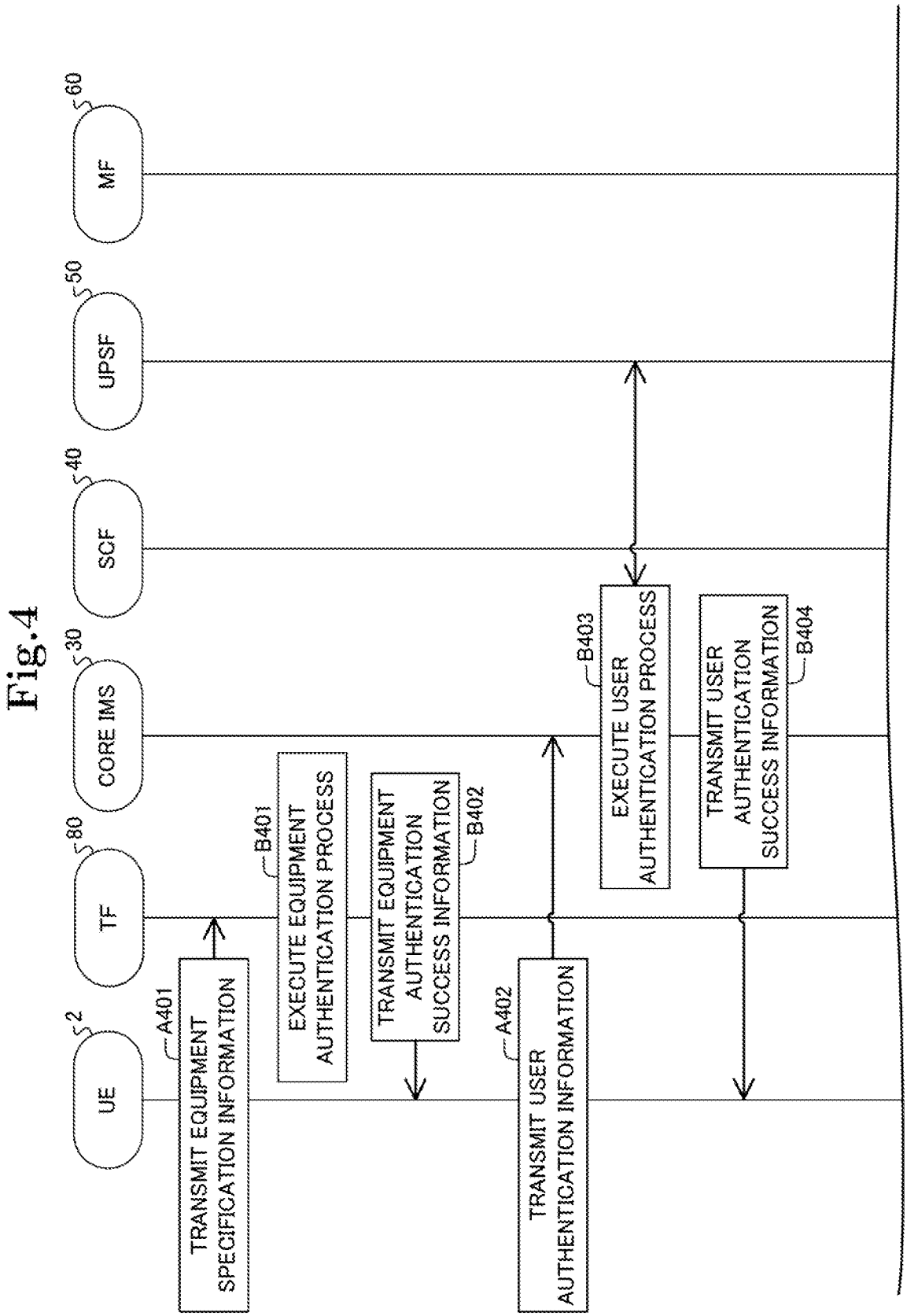

UE
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TF
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CORE IMS
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SCF
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UPSF
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MF
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TRANSMIT EQUIPMENT SPECIFICATION INFORMATION
B401
EXECUTE EQUIPMENT AUTHENTICATION PROCESS
B402
TRANSMIT EQUIPMENT AUTHENTICATION SUCCESS INFORMATION
A402
TRANSMIT USER AUTHENTICATION INFORMATION
B403
EXECUTE USER AUTHENTICATION PROCESS
B404
TRANSMIT USER AUTHENTICATION SUCCESS INFORMATION

Fig.5

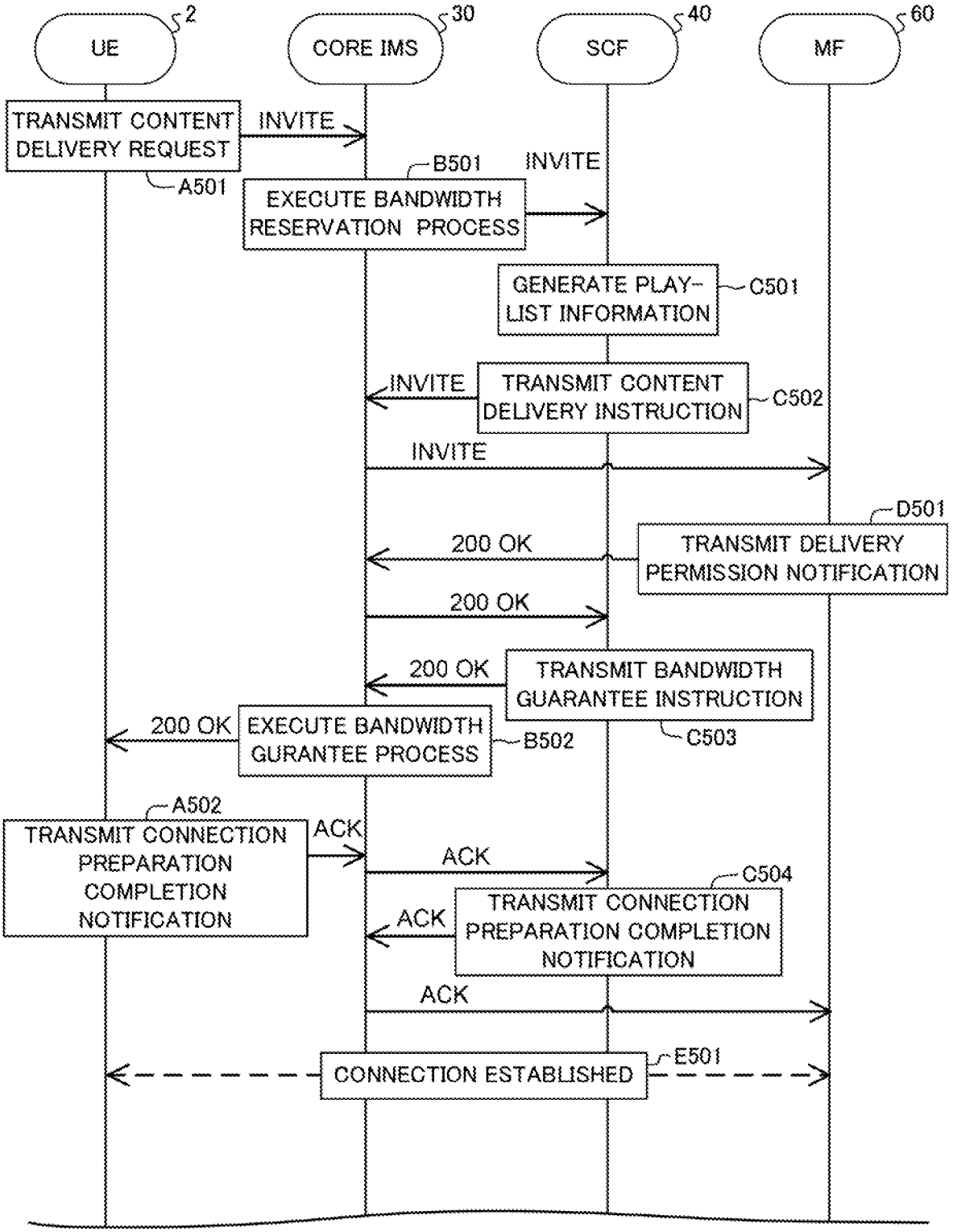

UE
2
CORE IMS
30
SCF
40
MF
60
TRANSMIT CONTENT DELIVERY REQUEST
INVITE
A501
B501
INVITE
EXECUTE BANDWIDTH RESERVATION PROCESS
GENERATE PLAY-LIST INFORMATION
C501
INVITE
TRANSMIT CONTENT DELIVERY INSTRUCTION
C502
INVITE
D501
200 OK
TRANSMIT DELIVERY PERMISSION NOTIFICATION
200 OK
200 OK
TRANSMIT BANDWIDTH GUARANTEE INSTRUCTION
C503
200 OK
EXECUTE BANDWIDTH GURANTEE PROCESS
B502
A502
TRANSMIT CONNECTION PREPARATION COMPLETION NOTIFICATION
ACK
ACK
C504
ACK
TRANSMIT CONNECTION PREPARATION COMPLETION NOTIFICATION
ACK
CONNECTION ESTABLISHED
E501

Fig.6

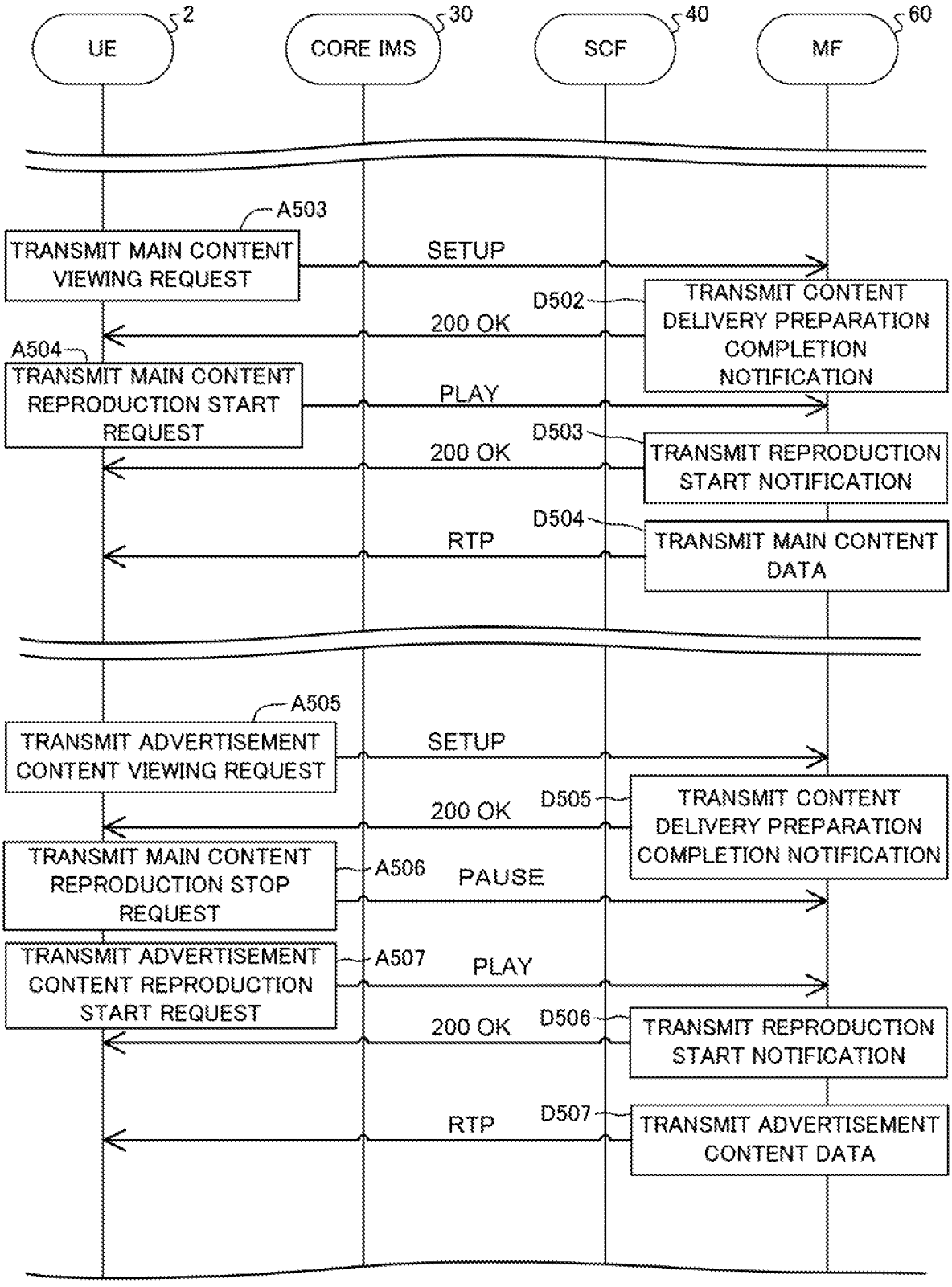

UE
2
CORE IMS
30
SCF
40
MF
60
A503
TRANSMIT MAIN CONTENT VIEWING REQUEST
SETUP
D502
TRANSMIT CONTENT DELIVERY PREPARATION COMPLETION NOTIFICATION
200 OK
A504
TRANSMIT MAIN CONTENT REPRODUCTION START REQUEST
PLAY
D503
TRANSMIT REPRODUCTION START NOTIFICATION
200 OK
D504
TRANSMIT MAIN CONTENT DATA
RTP
A505
TRANSMIT ADVERTISEMENT CONTENT VIEWING REQUEST
SETUP
D505
TRANSMIT CONTENT DELIVERY PREPARATION COMPLETION NOTIFICATION
200 OK
TRANSMIT MAIN CONTENT REPRODUCTION STOP REQUEST
A506
PAUSE
TRANSMIT ADVERTISEMENT CONTENT REPRODUCTION START REQUEST
A507
PLAY
D506
TRANSMIT REPRODUCTION START NOTIFICATION
200 OK
D507
TRANSMIT ADVERTISEMENT CONTENT DATA
RTP

Fig.7

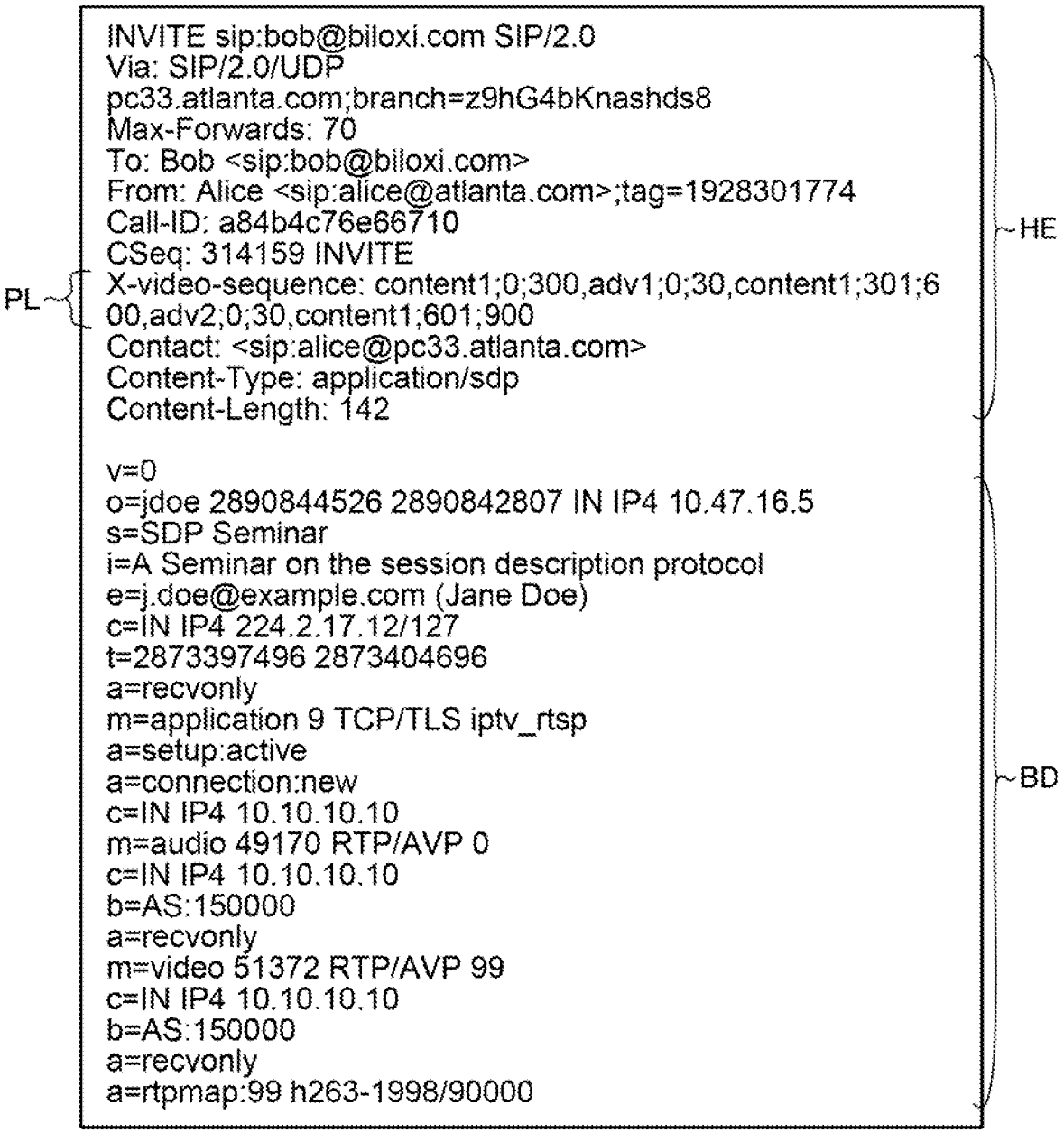

INVITE sip:bob@biloxi.com SIP/2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
X-video-sequence: content1;0;300,adv1;0;30,content1;301;6
00,adv2;0;30,content1;601;900
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: application/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000
PL
HE
BD

Fig.8

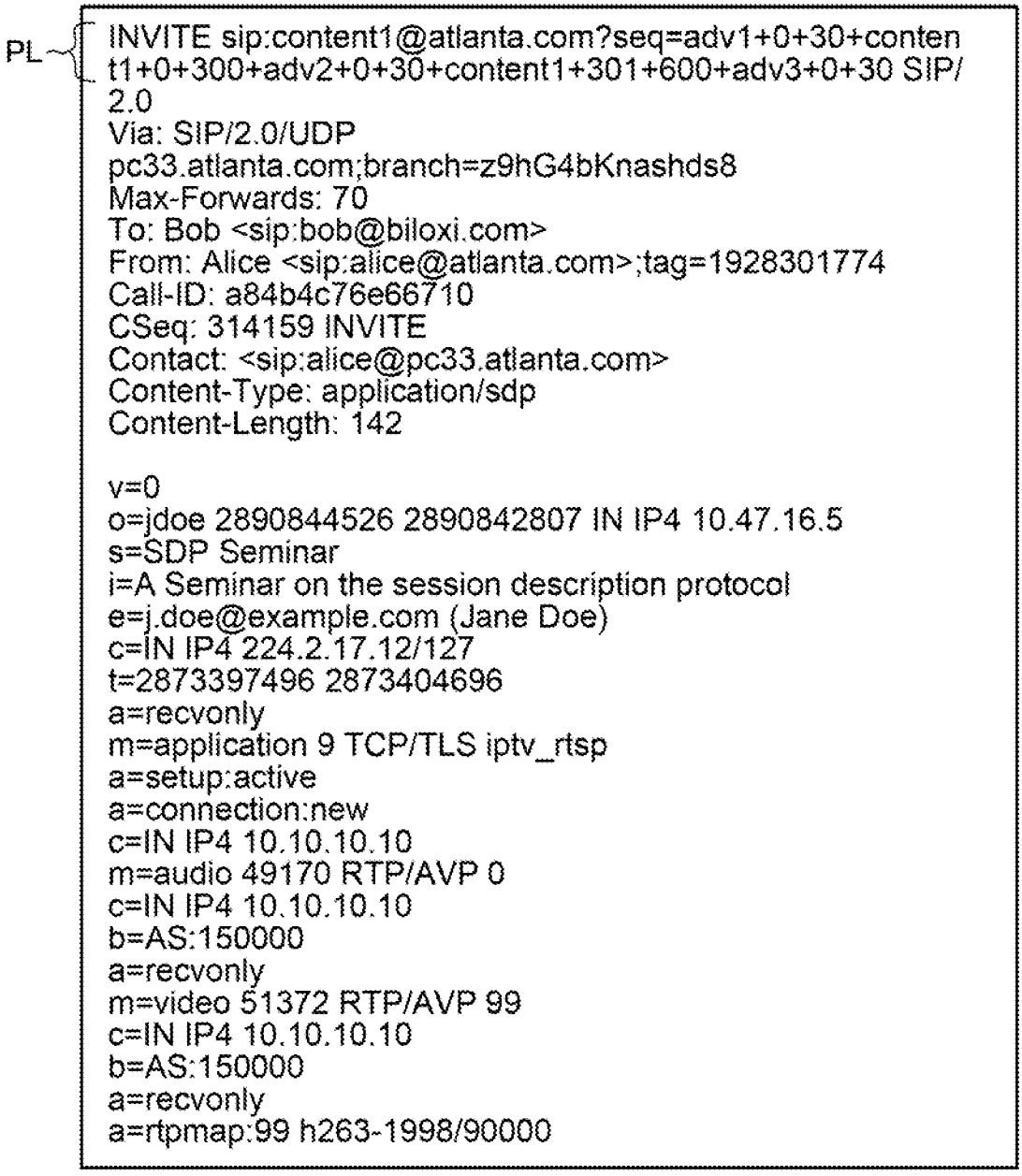

PL
INVITE sip:content1@atlanta.com?seq=adv1+0+30+conten
t1+0+300+adv2+0+30+content1+301+600+adv3+0+30 SIP/
2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: application/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000

Fig.9

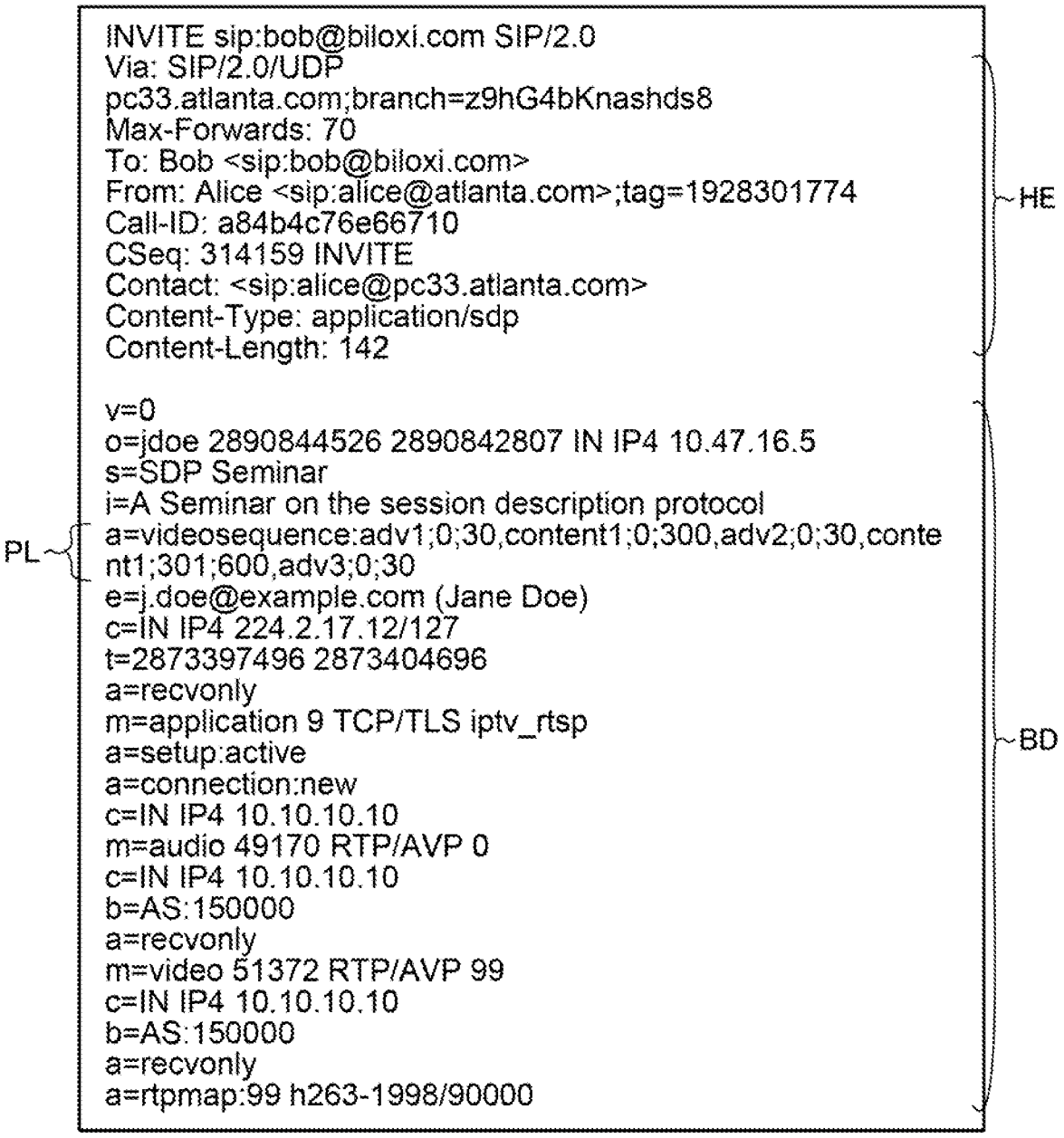

INVITE sip:bob@biloxi.com SIP/2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: application/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
a=videosequence:adv1;0;30,content1;0;300,adv2;0;30,conte
nt1;301;600,adv3;0;30
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000
HE
PL
BD

Fig.10

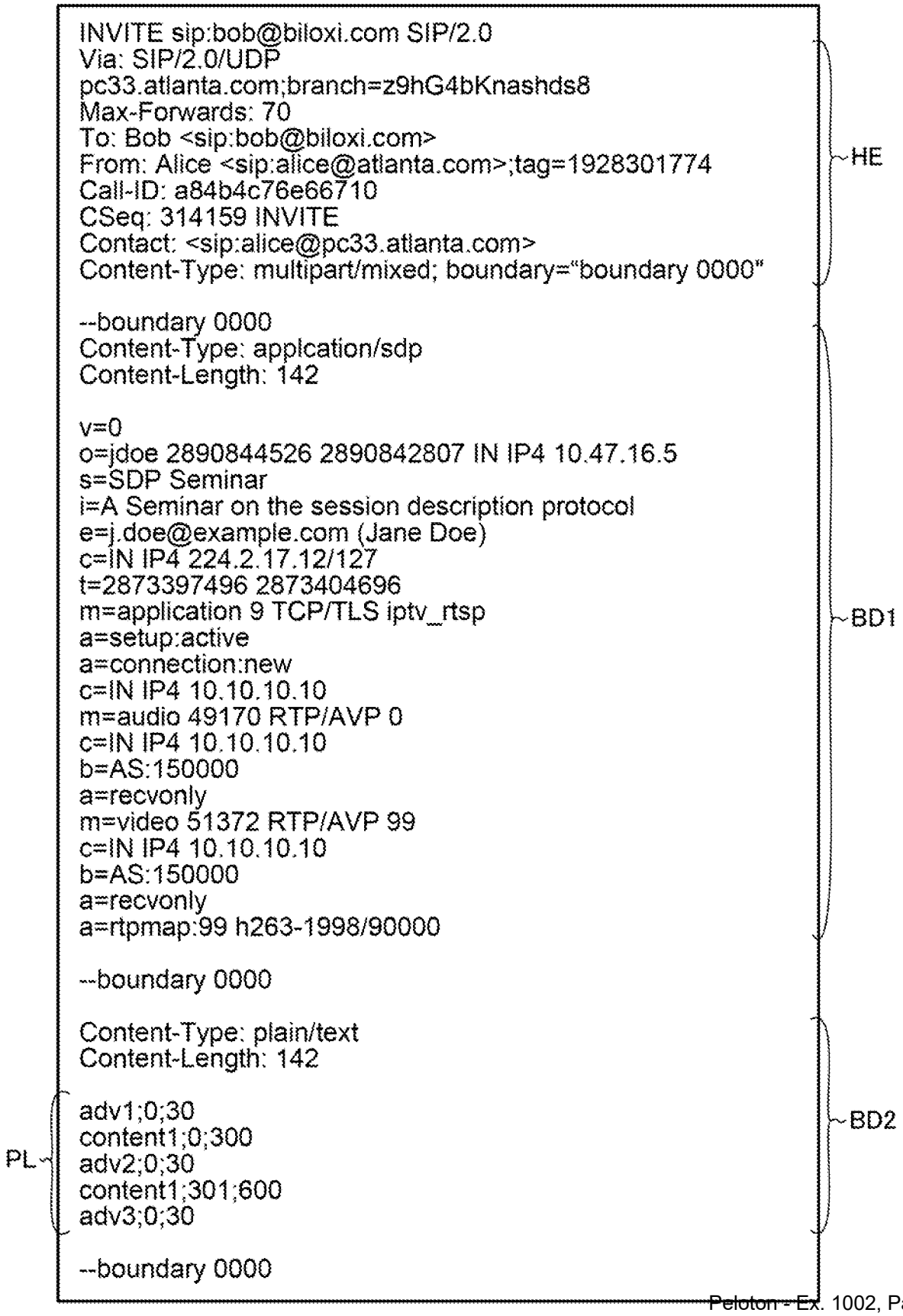

INVITE sip:bob@biloxi.com SIP/2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: multipart/mixed; boundary="boundary 0000"
--boundary 0000
Content-Type: application/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000
--boundary 0000
Content-Type: plain/text
Content-Length: 142
adv1;0;30
content1;0;300
adv2;0;30
content1;301;600
adv3;0;30
--boundary 0000
HE
BD1
BD2
PL

Fig.11

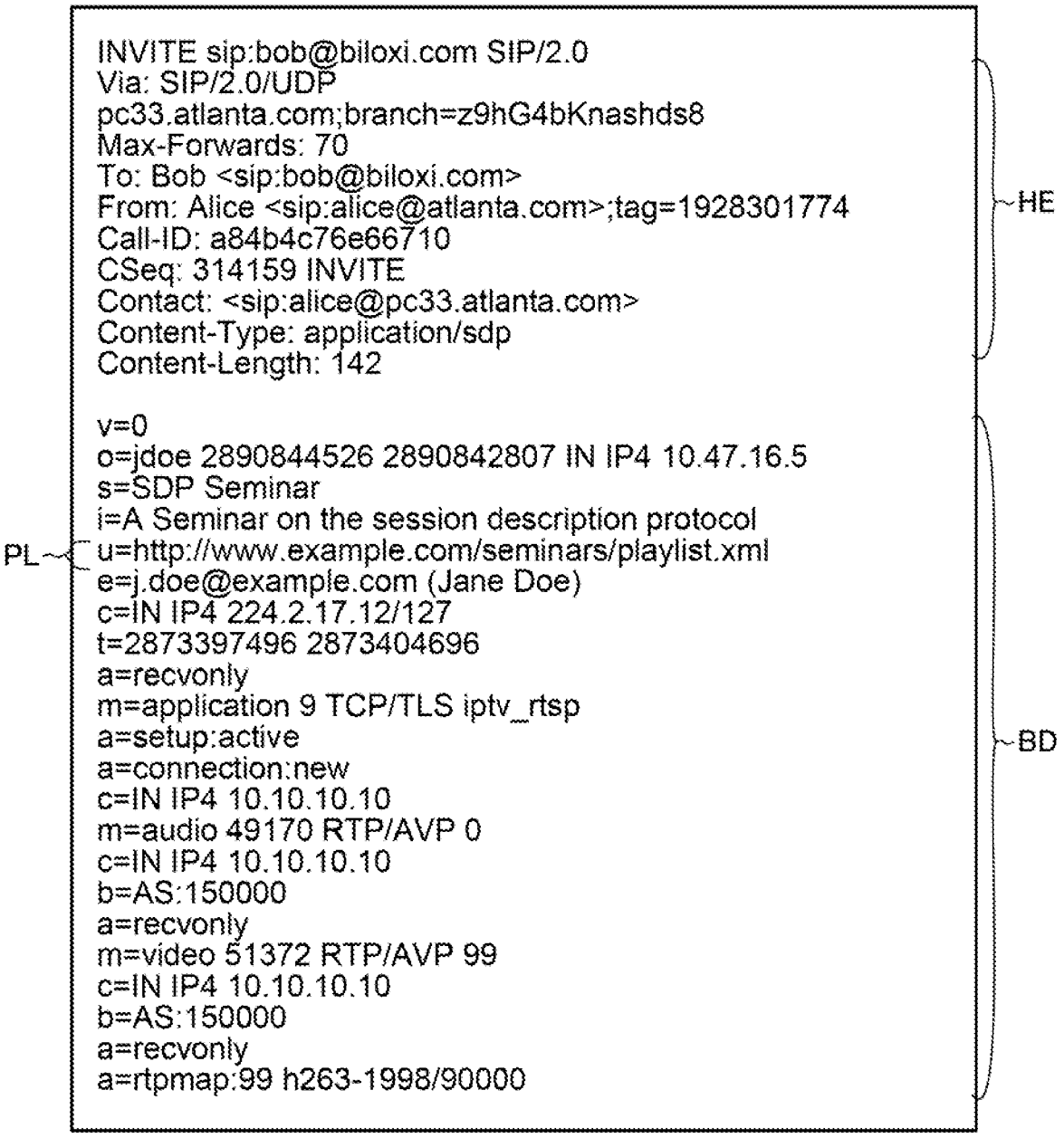

INVITE sip:bob@biloxi.com SIP/2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: application/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
u=http://www.example.com/seminars/playlist.xml
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000
HE
BD
PL

Fig.12

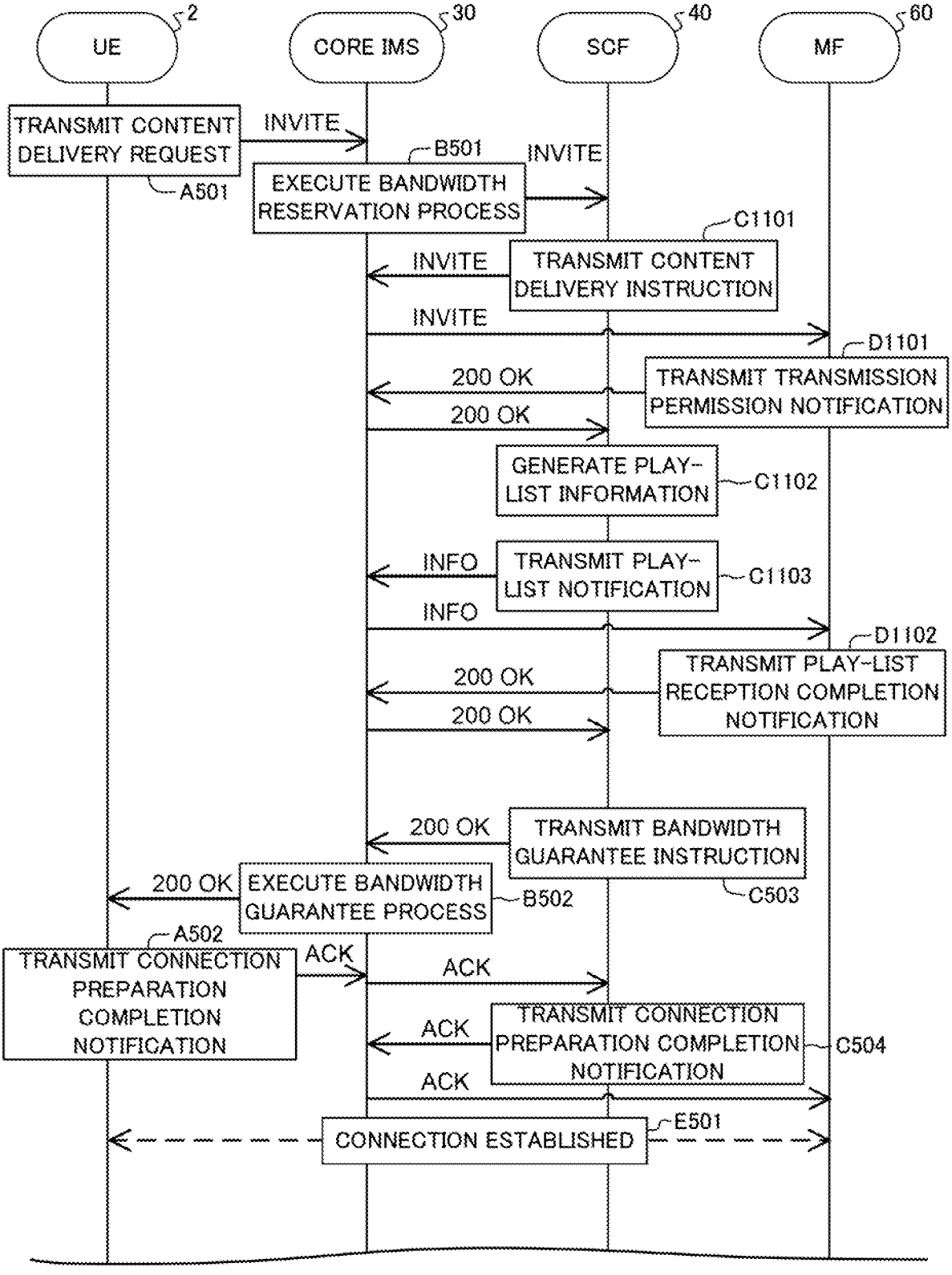

UE
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CORE IMS
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SCF
40
MF
60
TRANSMIT CONTENT DELIVERY REQUEST
A501
INVITE
B501
EXECUTE BANDWIDTH RESERVATION PROCESS
INVITE
C1101
TRANSMIT CONTENT DELIVERY INSTRUCTION
INVITE
D1101
TRANSMIT TRANSMISSION PERMISSION NOTIFICATION
200 OK
200 OK
GENERATE PLAY-LIST INFORMATION
C1102
INFO
TRANSMIT PLAY-LIST NOTIFICATION
C1103
INFO
D1102
TRANSMIT PLAY-LIST RECEPTION COMPLETION NOTIFICATION
200 OK
200 OK
200 OK
TRANSMIT BANDWIDTH GUARANTEE INSTRUCTION
C503
200 OK
EXECUTE BANDWIDTH GUARANTEE PROCESS
B502
A502
TRANSMIT CONNECTION PREPARATION COMPLETION NOTIFICATION
ACK
ACK
ACK
TRANSMIT CONNECTION PREPARATION COMPLETION NOTIFICATION
C504
ACK
CONNECTION ESTABLISHED
E501

Fig.13

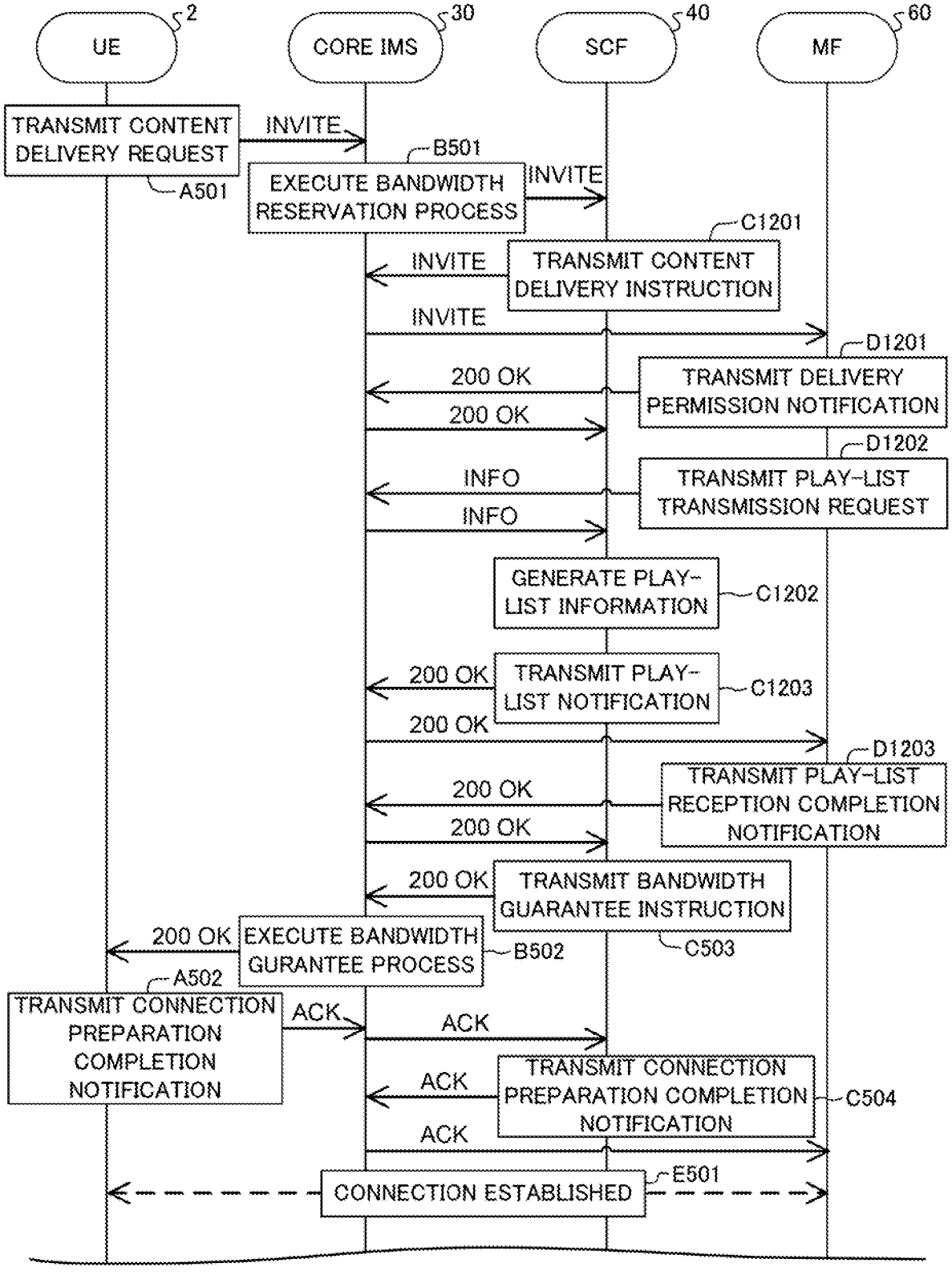
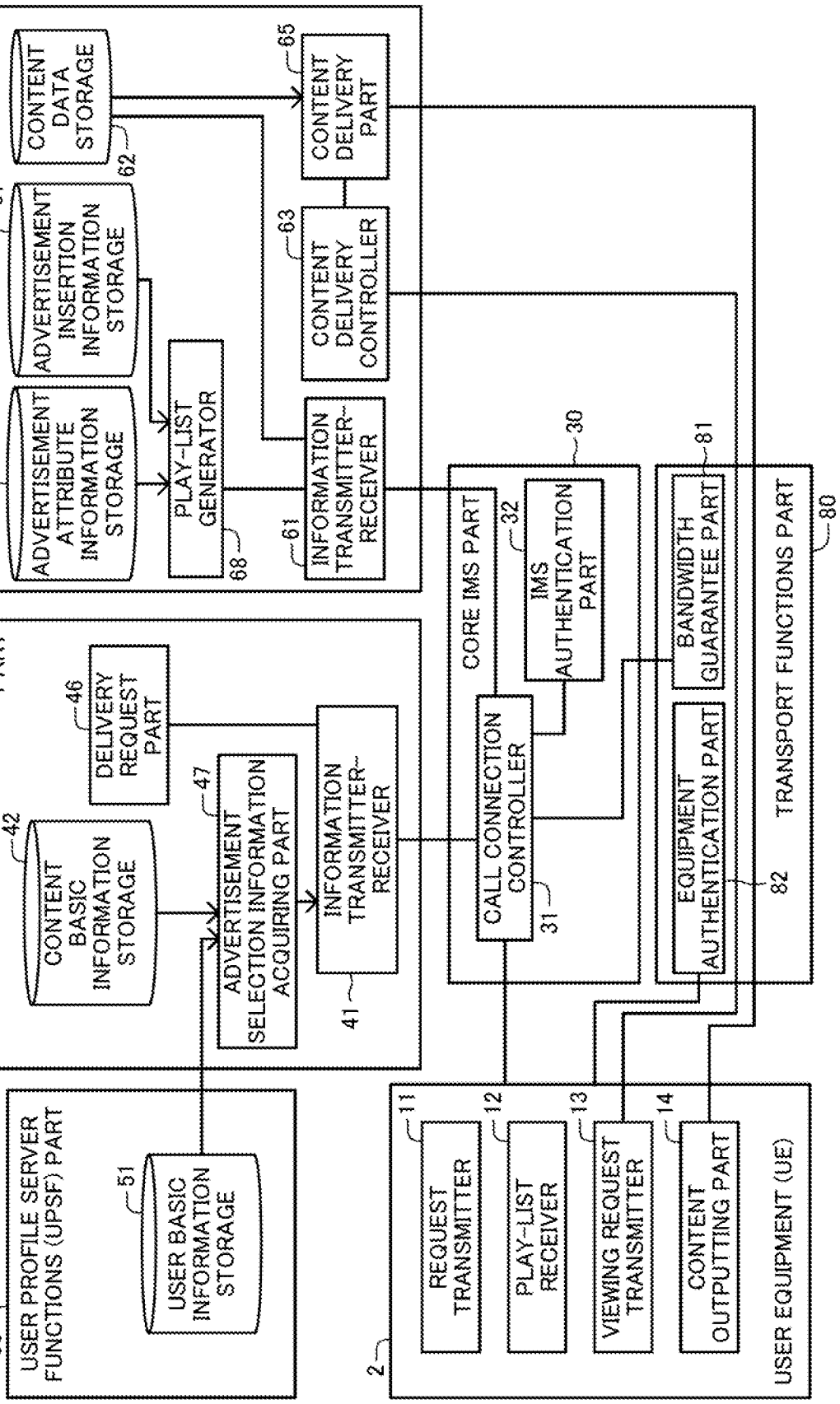

UE
2
CORE IMS
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SCF
40
MF
60
TRANSMIT CONTENT DELIVERY REQUEST
INVITE
B501
EXECUTE BANDWIDTH RESERVATION PROCESS
INVITE
A501
C1201
INVITE
TRANSMIT CONTENT DELIVERY INSTRUCTION
INVITE
D1201
200 OK
TRANSMIT DELIVERY PERMISSION NOTIFICATION
200 OK
D1202
INFO
TRANSMIT PLAY-LIST TRANSMISSION REQUEST
INFO
GENERATE PLAY-LIST INFORMATION
C1202
200 OK
TRANSMIT PLAY-LIST NOTIFICATION
C1203
200 OK
D1203
200 OK
TRANSMIT PLAY-LIST RECEPTION COMPLETION NOTIFICATION
200 OK
200 OK
TRANSMIT BANDWIDTH GUARANTEE INSTRUCTION
C503
200 OK
EXECUTE BANDWIDTH GURANTEE PROCESS
B502
A502
TRANSMIT CONNECTION PREPARATION COMPLETION NOTIFICATION
ACK
ACK
ACK
TRANSMIT CONNECTION PREPARATION COMPLETION NOTIFICATION
C504
ACK
CONNECTION ESTABLISHED
E501

Fig.14



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IPR2023-01241 (Peloton v. NEC)

Fig.15

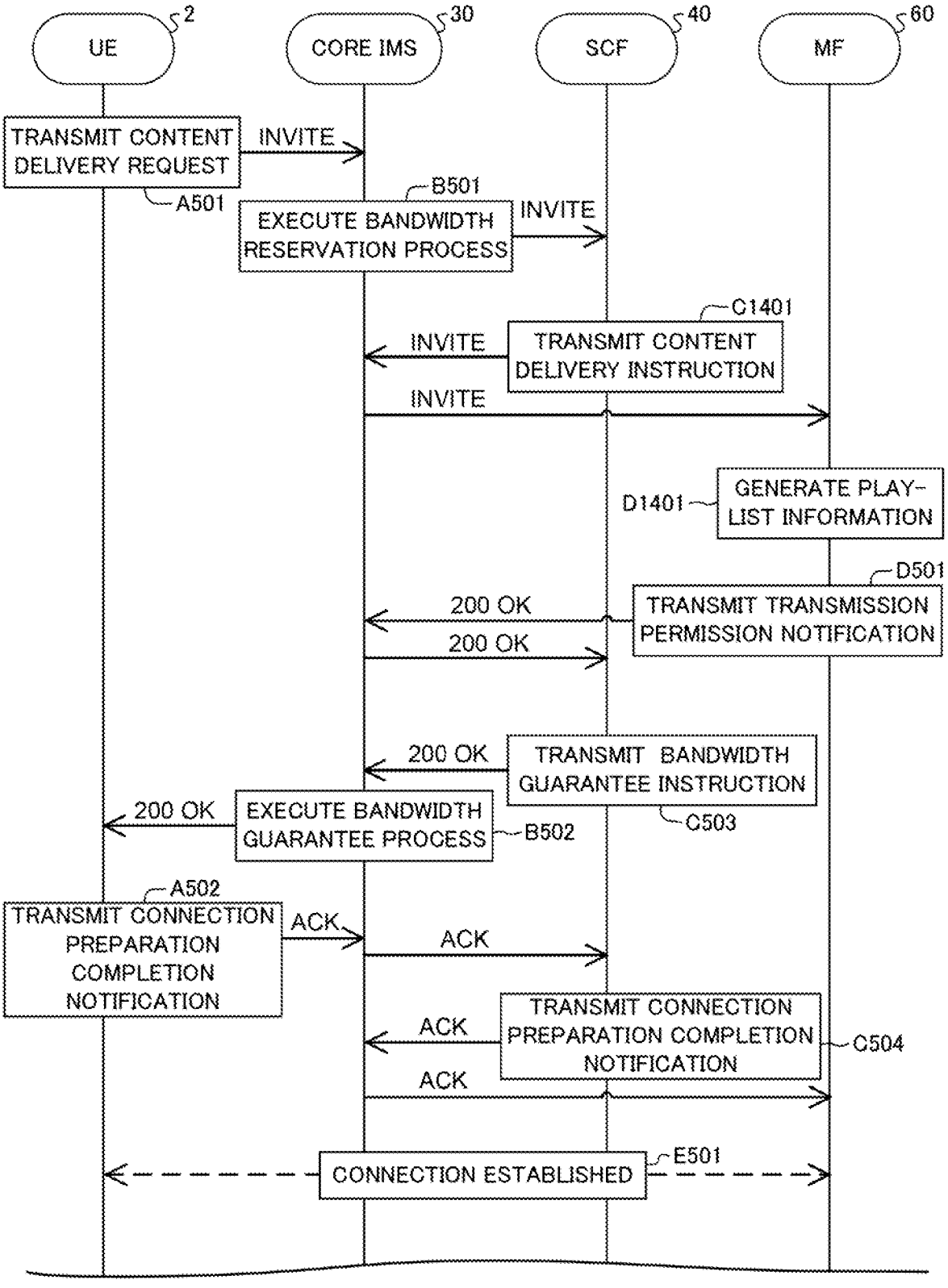

UE
2
CORE IMS
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SCF
40
MF
60
TRANSMIT CONTENT DELIVERY REQUEST
INVITE
A501
B501
EXECUTE BANDWIDTH RESERVATION PROCESS
INVITE
C1401
INVITE
TRANSMIT CONTENT DELIVERY INSTRUCTION
INVITE
D1401
GENERATE PLAY-LIST INFORMATION
D501
200 OK
TRANSMIT TRANSMISSION PERMISSION NOTIFICATION
200 OK
200 OK
TRANSMIT BANDWIDTH GUARANTEE INSTRUCTION
C503
200 OK
EXECUTE BANDWIDTH GUARANTEE PROCESS
B502
A502
TRANSMIT CONNECTION PREPARATION COMPLETION NOTIFICATION
ACK
ACK
ACK
TRANSMIT CONNECTION PREPARATION COMPLETION NOTIFICATION
C504
ACK
CONNECTION ESTABLISHED
E501

Fig.16

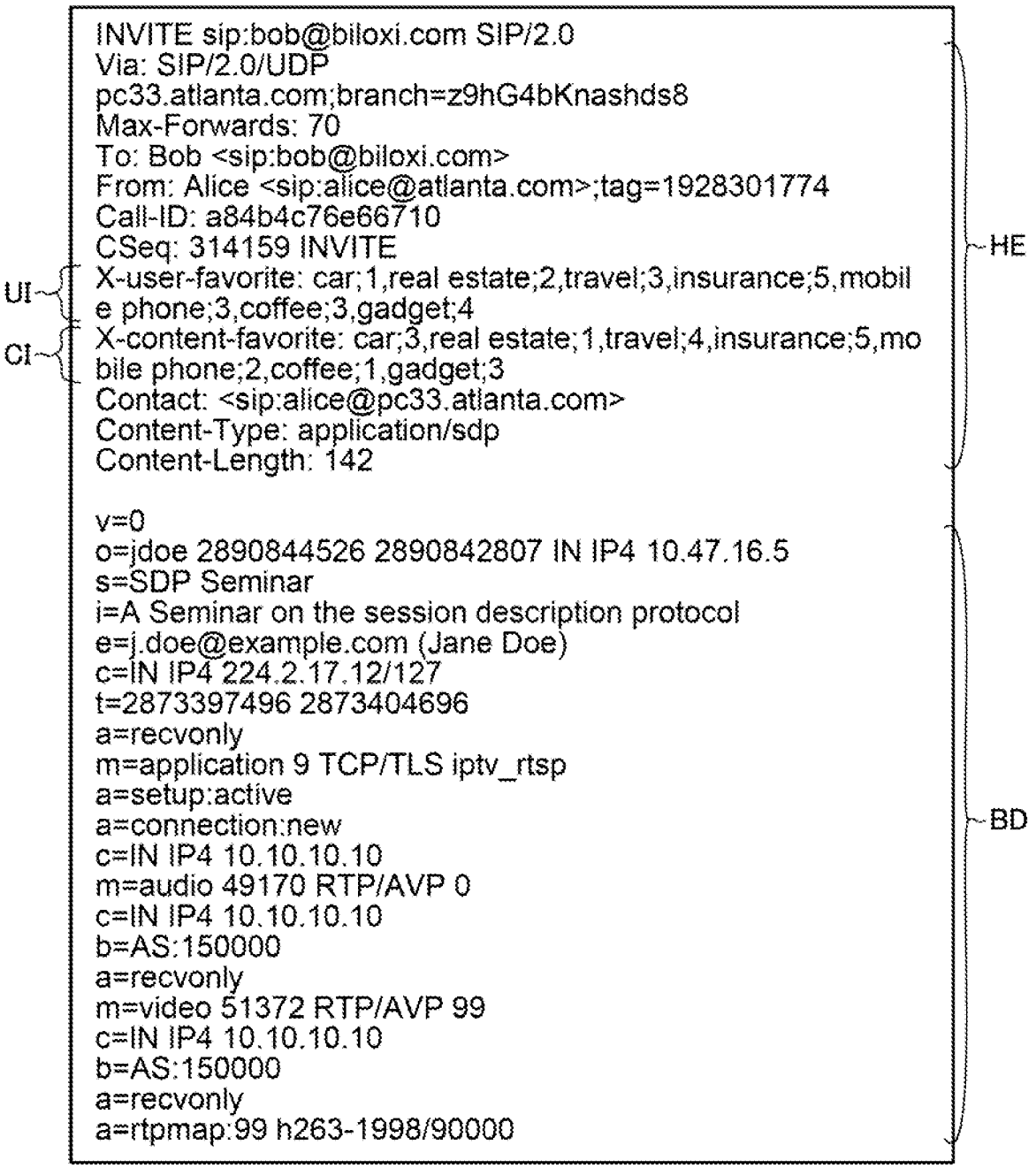

INVITE sip:bob@biloxi.com SIP/2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
X-user-favorite: car;1,real estate;2,travel;3,insurance;5,mobil
e phone;3,coffee;3,gadget;4
X-content-favorite: car;3,real estate;1,travel;4,insurance;5,mo
bile phone;2,coffee;1,gadget;3
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: application/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000
UI
CI
HE
BD

Fig.17

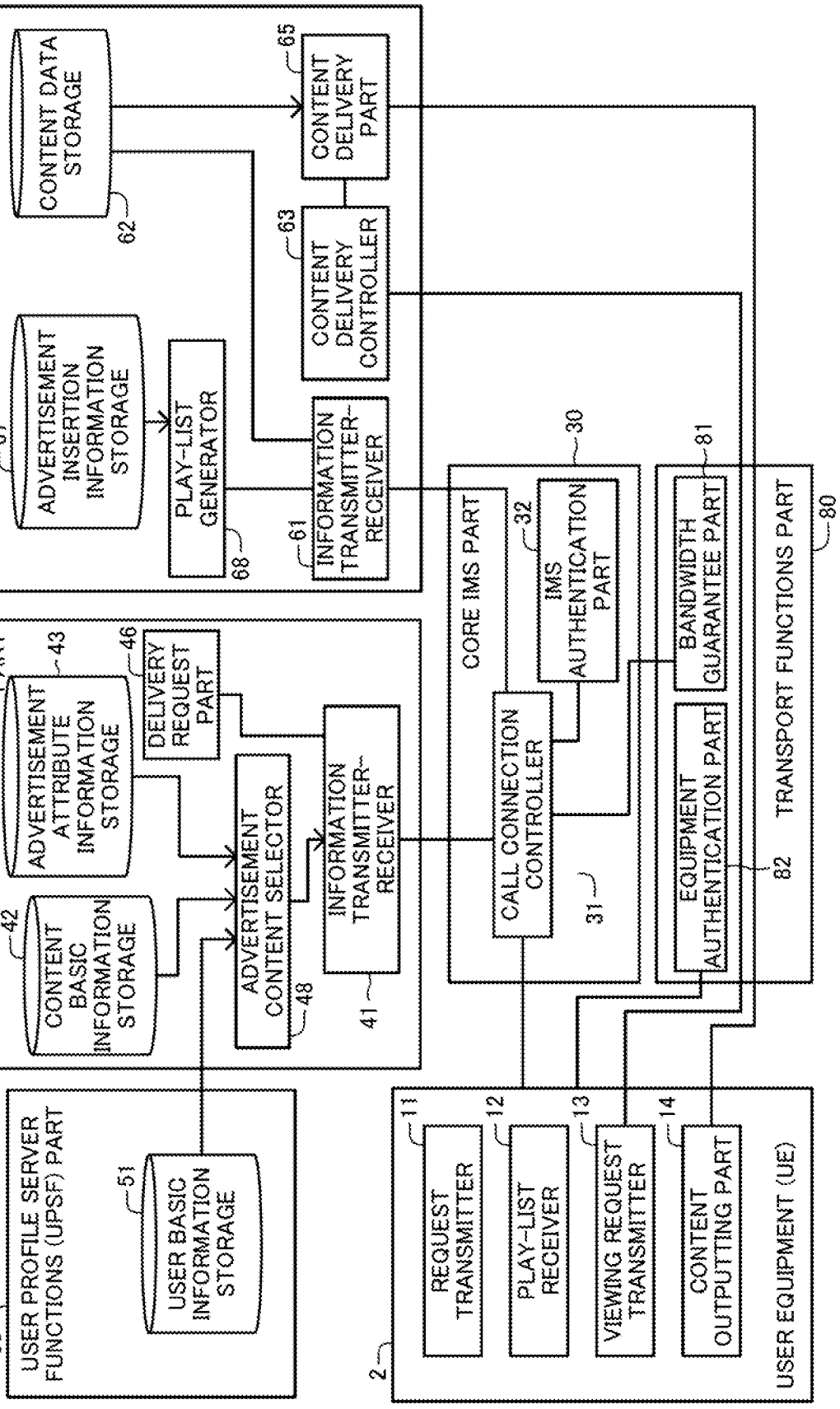

60
MEDIA FUNCTIONS (MF) PART
CONTENT DATA STORAGE
62
65
CONTENT DELIVERY PART
63
CONTENT DELIVERY CONTROLLER
67
ADVERTISEMENT INSERTION INFORMATION STORAGE
PLAY-LIST GENERATOR
68
61
INFORMATION TRANSMITTER-RECEIVER
40
SERVICE CONTROL FUNCTIONS (SCF) PART
43
ADVERTISEMENT ATTRIBUTE INFORMATION STORAGE
46
DELIVERY REQUEST PART
42
CONTENT BASIC INFORMATION STORAGE
ADVERTISEMENT CONTENT SELECTOR
48
INFORMATION TRANSMITTER-RECEIVER
41
CORE IMS PART
30
32
IMS AUTHENTICATION PART
CALL CONNECTION CONTROLLER
31
81
BANDWIDTH GUARANTEE PART
EQUIPMENT AUTHENTICATION PART
82
TRANSPORT FUNCTIONS PART
80
50
USER PROFILE SERVER FUNCTIONS (UPSF) PART
51
USER BASIC INFORMATION STORAGE
2
11
REQUEST TRANSMITTER
12
PLAY-LIST RECEIVER
13
VIEWING REQUEST TRANSMITTER
14
CONTENT OUTPUTTING PART
USER EQUIPMENT (UE)

Fig.18

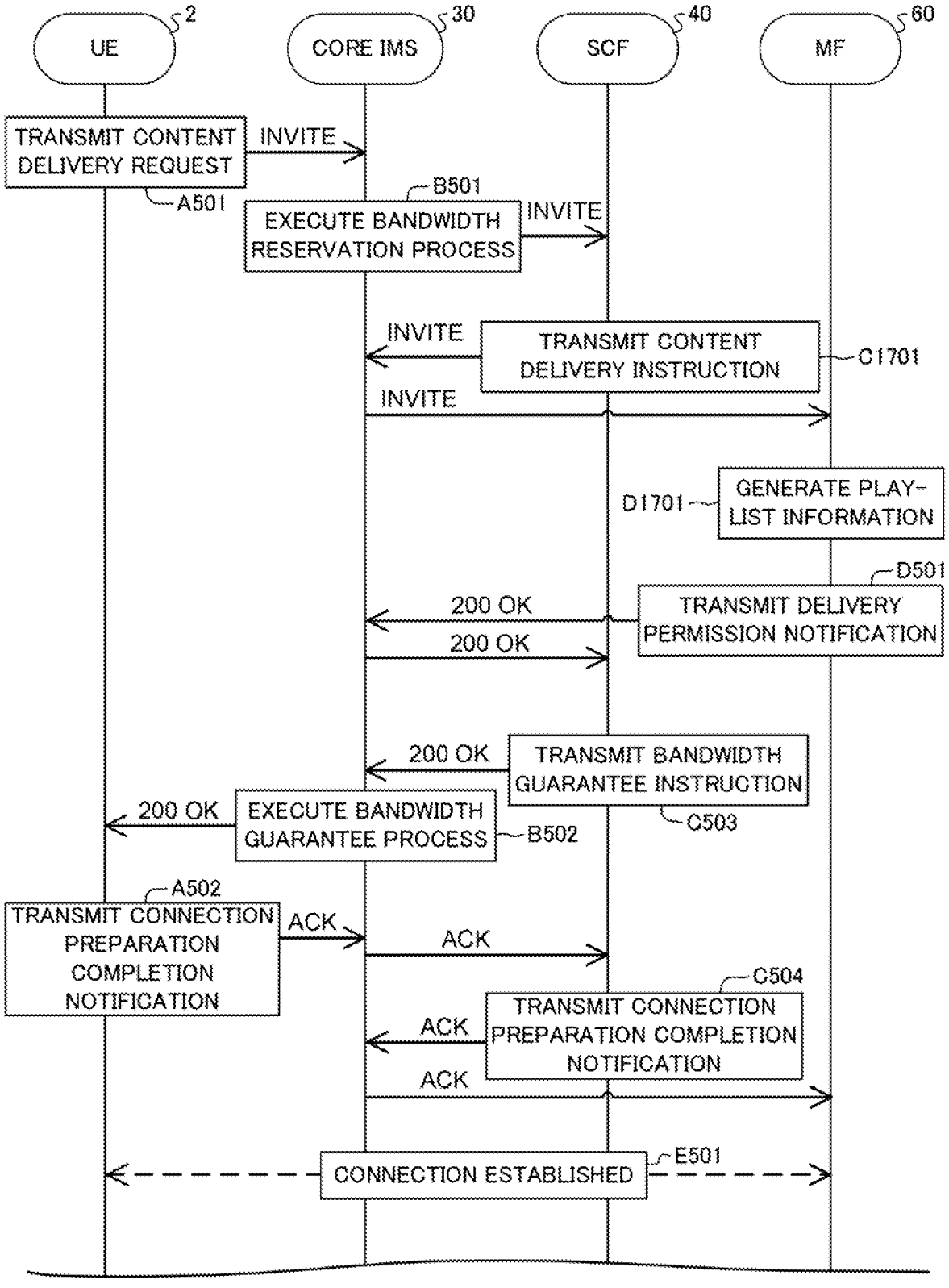

UE
2
CORE IMS
30
SCF
40
MF
60
TRANSMIT CONTENT DELIVERY REQUEST
INVITE
A501
B501
EXECUTE BANDWIDTH RESERVATION PROCESS
INVITE
INVITE
TRANSMIT CONTENT DELIVERY INSTRUCTION
C1701
INVITE
D1701
GENERATE PLAY-LIST INFORMATION
D501
200 OK
TRANSMIT DELIVERY PERMISSION NOTIFICATION
200 OK
200 OK
TRANSMIT BANDWIDTH GUARANTEE INSTRUCTION
C503
200 OK
EXECUTE BANDWIDTH GUARANTEE PROCESS
B502
A502
TRANSMIT CONNECTION PREPARATION COMPLETION NOTIFICATION
ACK
ACK
C504
ACK
TRANSMIT CONNECTION PREPARATION COMPLETION NOTIFICATION
ACK
CONNECTION ESTABLISHED
E501

Fig.19

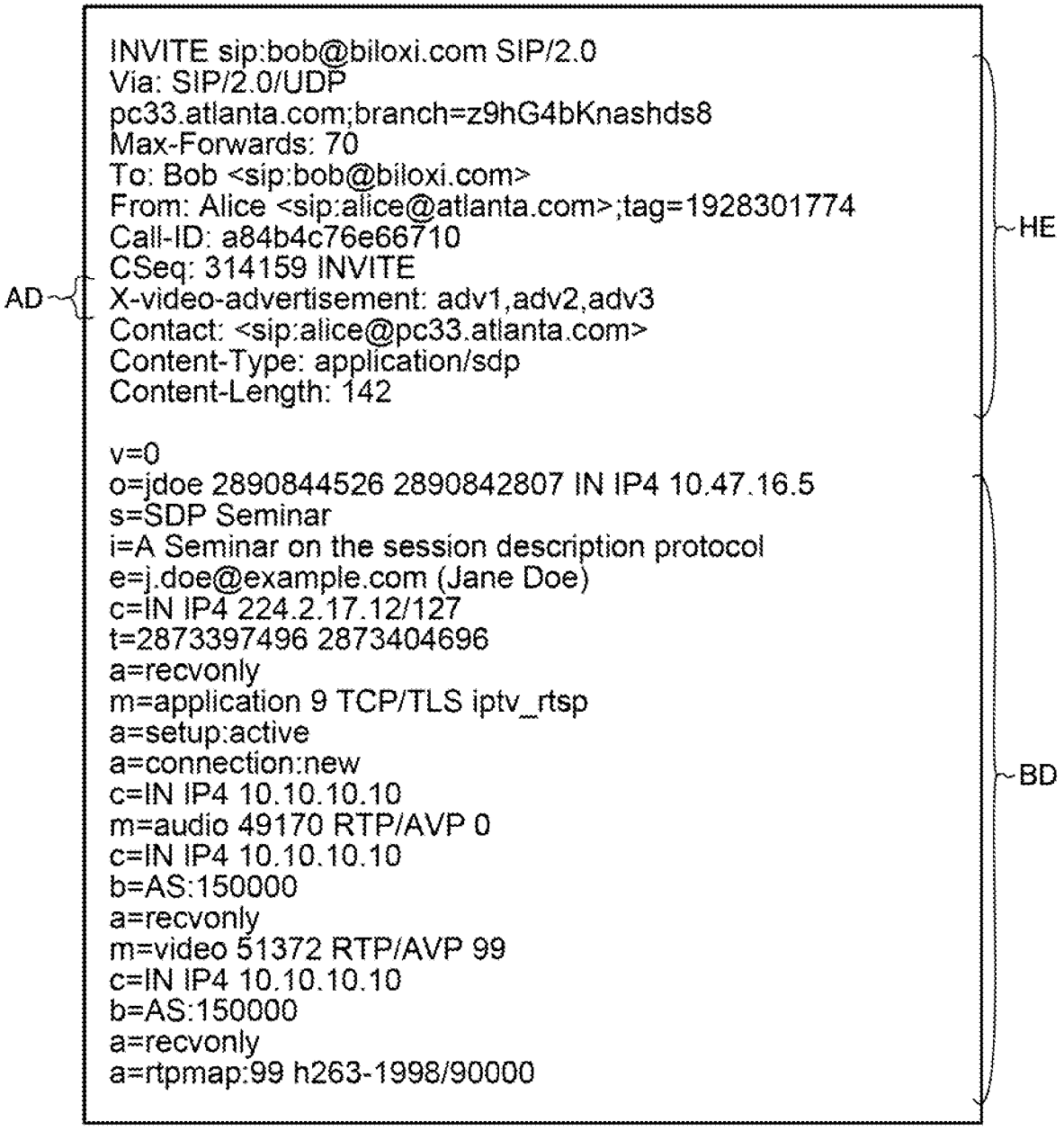
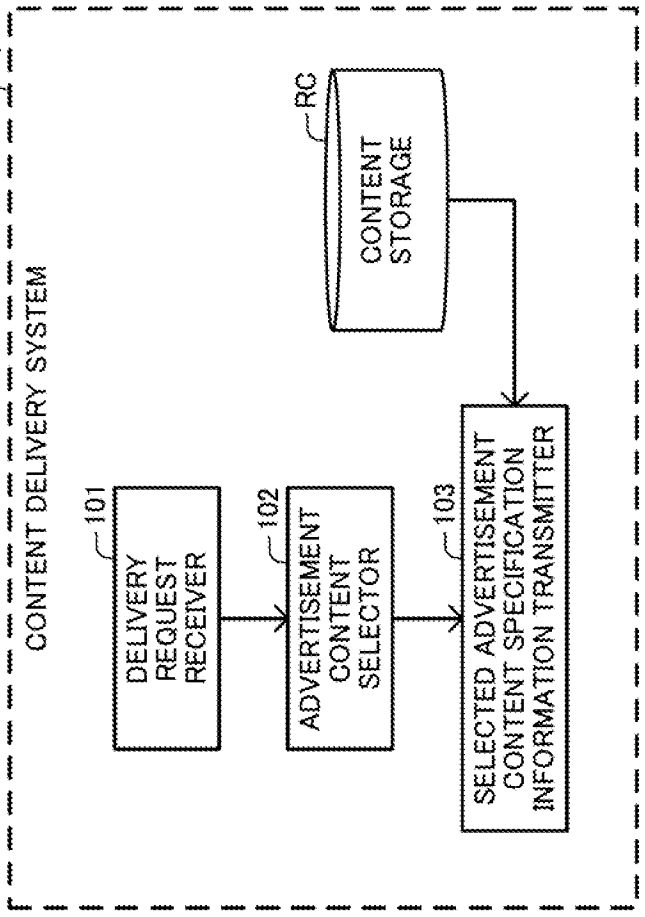

INVITE sip:bob@biloxi.com SIP/2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
X-video-advertisement: adv1,adv2,adv3
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: application/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000
AD
HE
BD

Fig.20


1
CONTENT DELIVERY SYSTEM
101
DELIVERY REQUEST RECEIVER
102
ADVERTISEMENT CONTENT SELECTOR
103
SELECTED ADVERTISEMENT CONTENT SPECIFICATION INFORMATION TRANSMITTER
RC
CONTENT STORAGE

Electronic Patent Application Fee Transmittal

Application Number:	
Filing Date:	
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	KUNIHIRO TANIGUCHI
Filer:	Jackson Chen/KEN SATO
Attorney Docket Number:	J-11-0248

Filed as Large Entity

U.S. National Stage under 35 USC 371 Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
National Stage Fee	1631	1	330	330
Natl Stage Search Fee - Report provided	1642	1	430	430
National Stage Exam - all other cases	1633	1	220	220
Pages:				
Claims:				
Claims in excess of 20	1615	8	52	416
Independent claims in excess of 3	1614	6	220	1320
Miscellaneous-Filing:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**2716**

Electronic Acknowledgement Receipt

EFS ID:	10104665
Application Number:	13129756
International Application Number:	PCT/JP2009/006140
Confirmation Number:	1971
Title of Invention:	CONTENT DELIVERY SYSTEM
First Named Inventor/Applicant Name:	KUNIHIRO TANIGUCHI
Customer Number:	71799
Filer:	Jackson Chen/KEN SATO
Filer Authorized By:	Jackson Chen
Attorney Docket Number:	J-11-0248
Receipt Date:	17-MAY-2011
Filing Date:	
Time Stamp:	17:14:35
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	Electronic Funds Transfer
Payment was successfully received in RAM	$2716
RAM confirmation Number	3905
Deposit Account	
Authorized User	

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Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)

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1	Oath or Declaration filed	J-11-0248_DEC-POA.pdf	530948 be71bbf26a6ce3dd82458a5f449f7b32ec2ec9bd	no	3
Warnings:					
Information:					
2	Preliminary Amendment	J-11-0248_Preliminary_Amendment.pdf	3500389 b7fa8a04df647bdab11d7715725199519c0e2d9c	no	20
Warnings:					
Information:					
3		J-11-0248_Specification_Drawings.pdf	18839606 2a086ce07cf29b3b83c4e3f148c4d2183ff8a429	yes	89

Multipart Description/PDF files in .zip description

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Warnings:					
Information:					
4	Fee Worksheet (PTO-875)	fee-info.pdf	37951 5c79f9b50242396cf56fd43fc785a9e0d56c7542	no	2
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DOCKET NO.

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

CONTENT DELIVERY SYSTEM

the specification of which

(check one)

[ ] is attached hereto.

[X] was filed on November 17, 2009 as a United States Application No. or PCT International Application Serial No. PCT/JP2009/006140
and was amended on _____ (if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37 Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119 (a)-(d) or Section 365(b) of any foreign application(s) for patent or inventor's certificate, or Section 365(a) of any PCT international application which designated at least one country other than the United States, listed below.

Prior Foreign Application Number(s)	Country	Foreign Filing Date
2008-294270	Japan	November 18, 2008

I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below:

(Application Number)	(Filing Date)
(Application Number)	(Filing Date)

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s), or Section 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35, United States Code, Section 112, I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, C.F.R., Section 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

Application Serial No.	Filing Date	Status
PCT/JP2009/006140	November 17, 2009	Pending

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

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Amendments to the Specification:

Amend lines 25-28 on page 57 as follows and move after the title of the invention and before TECHNICAL FIELD:

~~[0262]~~

The present invention is the National Phase of PCT/JP2009/006140, filed November 17, 2009, which is based upon and claims the benefit of priority from Japanese patent application No. 2008-294270 filed November 18, 2008, the disclosure of which is incorporated herein in its entirety by reference.

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AMENDMENT TO CLAIMS

CLAIMS

1. (Currently amended) A content delivery system comprising an application server system and a connection control system,

the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information,

the application server system comprising:

a content storage ~~means~~unit for storing ~~advertisement~~sub content data representing ~~advertisement~~sub content and main content data representing main content;

a delivery request reception ~~means~~unit for receiving, via the connection control system, a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

~~advertisement~~an sub content selection ~~means~~unit for selecting the stored ~~advertisement~~sub content data based on ~~advertisement~~ selection information containing ~~advertisement~~ attribute information representing an attribute of the ~~advertisement~~sub content; and

a selected ~~advertisement~~sub content specification information transmission ~~means~~unit for transmitting selected ~~advertisement~~sub content specification information for specifying the selected ~~advertisement~~sub content data via the connection control system to the user equipment which has transmitted the content delivery request.

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2. (Currently amended) The content delivery system according to claim 1, wherein:

the user equipment comprises:

a selected ~~advertisement~~sub content specification information reception ~~means~~unit for receiving the selected ~~advertisement~~sub content specification information transmitted by the application server system; and

a content viewing request transmission ~~means~~unit for transmitting, to the application server system, a main content viewing request containing the main content identification information and an ~~advertisement~~sub content viewing request containing the received selected ~~advertisement~~sub content specification information when connection with the application server system is established by the connection control system, and

the application server system comprises a content delivering ~~means~~unit for receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by the main content identification information contained in the received main content viewing request to the user equipment, and for receiving the ~~advertisement~~sub content viewing request transmitted by the user equipment and transmitting ~~advertisement~~sub content data specified by the selected ~~advertisement~~sub content specification information contained in the received ~~advertisement~~sub content viewing request to the user equipment.

3. (Currently amended) The content delivery system according to claim 1~~ or 2~~, wherein the user equipment comprises a content outputting ~~means~~unit for receiving main content data and ~~advertisement~~sub content data transmitted by the application server system and outputting, based on the received main content data and ~~advertisement~~sub content data, viewing content in which ~~advertisement~~sub content represented by the ~~advertisement~~sub content data is inserted in main content represented by the main content data.

4. (Currently amended) The content delivery system according to ~~any of claims~~claim 1 ~~to 3~~, wherein:

the selected ~~advertisement~~sub content specification information transmission ~~means~~unit is configured to transmit, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected ~~advertisement~~sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the ~~advertisement~~sub content specified by the selected ~~advertisement~~sub content specification information are output;

the selected ~~advertisement~~sub content specification information reception ~~means~~unit is configured to receive the play-list information transmitted by the application server system; and

the content viewing request transmission ~~means~~unit is configured to transmit the main content viewing request and the ~~advertisement~~sub content viewing request to the application server system, based on the received play-list information.

5. (Currently amended) The content delivery system according to ~~any of claims~~claim 1 ~~to 4~~, wherein:

the content storage ~~means~~unit is configured to store the ~~advertisement~~sub content data in association with ~~advertisement~~ attribute information representing an attribute of ~~advertisement~~sub content represented by the ~~advertisement~~sub content data;

the ~~advertisement~~ selection information contains user basic information that is information for specifying the ~~advertisement~~ attribute information and is information

associated with user identification information for identifying a user of the user equipment; and

the ~~advertisement~~sub content selection ~~means~~unit is configured to select ~~advertisement~~sub content data stored in association with the ~~advertisement~~ attribute information specified by the user basic information associated with the user identification information for identifying the user of the user equipment which has transmitted the content delivery request.

6. (Currently amended) The content delivery system according to ~~any of claims~~claim 1 ~~to 5~~, wherein:

the content storage ~~means~~unit is configured to store the ~~advertisement~~sub content data in association with ~~advertisement~~ attribute information representing an attribute of the ~~advertisement~~sub content represented by the ~~advertisement~~sub content data;

the ~~advertisement~~ selection information contains content basic information that is information for specifying the ~~advertisement~~ attribute information and is information associated with the main content identification information for identifying the main content; and

the ~~advertisement~~sub content selection ~~means~~unit is configured to select ~~advertisement~~sub content data stored in association with the ~~advertisement~~ attribute information specified by the content basic information associated with the main content identification information contained in the received content delivery request.

7. (Currently amended) The content delivery system according to ~~any of claims~~claim 1 ~~to 6~~, wherein the selected ~~advertisement~~sub content specification information transmission ~~means~~unit is configured to transmit the selected ~~advertisement~~sub content specification information to the user equipment via the connection control

system when the connection control system executes a process for establishing the connection.

8. (Currently amended) The content delivery system according to claim 7, wherein

the connection control system is configured to establish the connection by exchanging a predetermined connection establishment message with each of the user equipment and the application server system; and

the selected ~~advertisement~~sub content specification information transmission ~~means~~unit is configured to transmit the selected ~~advertisement~~sub content specification information to the user equipment via the connection control system by incorporating the selected ~~advertisement~~sub content specification information in the connection establishment message.

9. (Currently amended) The content delivery system according to ~~any of claims 1 to 8~~claim 1, wherein:

the application server system comprises a service control server and a media server; and

the service control server comprises the delivery request reception ~~means~~unit, the ~~advertisement~~sub content selection ~~means~~unit, and the selected ~~advertisement~~sub content specification information transmission ~~means~~unit~~; and~~

~~the media server comprises the content storage means~~.

10. (Currently amended) The content delivery system according to ~~any of claims~~claim 1~~ to 8~~, wherein:

~~the~~The application server system comprises a service control server and a media server;

the service control server comprises the delivery request reception

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~~means~~unit;

the media server comprises the content storage ~~means~~unit, the ~~advertisement~~sub content selection ~~means~~unit, and the selected ~~advertisement~~sub content specification information transmission ~~means~~unit;

the service control server further comprises ~~advertisement~~an selection information transmission ~~means~~unit for transmitting the ~~advertisement~~ selection information to the media server via the connection control system;

the media server further comprises ~~advertisement~~an selection information reception ~~means~~unit for receiving the ~~advertisement~~ selection information transmitted by the service control server; and

the ~~advertisement~~sub content selection ~~means~~unit is configured to select the ~~advertisement~~sub content data based on the received ~~advertisement~~ selection information.

11. (Currently amended) A content delivery system comprising an application server system and a connection control system,

the connection control system comprising a core IMS (Internet Protocol Multimedia Subsystem) part for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a media functions part for transmitting content data representing content to the user equipment with which ~~the~~ connection is established by the core IMS part;

a service control functions part for controlling a service provided by the media functions part; and

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a user profile server functions part for storing profile information of a user of the user equipment,

the media functions part comprising a content storage ~~means~~unit for storing ~~advertisement~~sub content data representing ~~advertisement~~sub content and main content data representing main content,

the service control functions part comprising:

a delivery request reception ~~means~~unit for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the core IMS part; and

~~advertisement~~an sub content selection ~~means~~unit for selecting the stored ~~advertisement~~sub content data based on ~~advertisement~~ selection information containing ~~advertisement~~ attribute information representing an attribute of the ~~advertisement~~sub content and preliminarily stored by the user profile server functions part, the service control functions part or the connection control system; and

a selected ~~advertisement~~sub content specification information transmission ~~means~~unit for transmitting selected ~~advertisement~~sub content specification information for specifying the selected ~~advertisement~~sub content data~~,~~ via the core IMS part to the user equipment which has transmitted the content delivery request.

12. (Currently amended) The content delivery system according to claim 11, wherein:

the user equipment comprises:

a selected ~~advertisement~~sub content specification information reception ~~means~~unit for receiving the selected ~~advertisement~~sub content specification information transmitted by the service control functions part; and

a content viewing request transmission ~~means~~unit for transmitting, to

the media functions part, a main content viewing request containing the main content identification information and an ~~advertisement~~sub content viewing request containing the received selected ~~advertisement~~sub content specification information, when connection with the media functions part is established by the core IMS part, and

the media functions part comprises a content delivering ~~means~~unit for receiving the main content viewing request transmitted by the user equipment and transmitting to the user equipment main content data identified by the main content identification information contained in the received main content viewing request, and for receiving the ~~advertisement~~sub content viewing request transmitted by the user equipment and transmitting to the user equipment ~~advertisement~~sub content data specified by the selected ~~advertisement~~sub content specification information contained in the received ~~advertisement~~sub content viewing request.

13. (Currently amended) The content delivery system according to claim 11 ~~or 12~~, wherein the user equipment comprises a content outputting ~~means~~unit for receiving main content data and ~~advertisement~~sub content data transmitted by the media functions part, and outputting, based on the received main content data and ~~advertisement~~sub content data, viewing content in which ~~advertisement~~sub content represented by the ~~advertisement~~sub content data is inserted in main content represented by the main content data.

14. (Currently amended) The content delivery system according to ~~any of claims~~claim 11 ~~to 13~~, wherein

the selected ~~advertisement~~sub content specification information transmission ~~means~~unit is configured to transmit, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that is

information containing the main content identification information contained in the content delivery request and the selected ~~advertisement~~sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the ~~advertisement~~sub content specified by the selected ~~advertisement~~sub content specification information are output;

the selected ~~advertisement~~sub content specification information reception ~~means~~unit is configured to receive the play-list information transmitted by the service control functions part; and

the content viewing request transmission ~~means~~unit is configured to transmit the main content viewing request and the ~~advertisement~~sub content viewing request to the media functions part, based on the received play-list information.

15. (Currently amended) A content delivery method comprising:

receiving equipment specification information transmitted by user equipment and establishing connection between an application server system and the user equipment based on the received equipment specification information, by a connection control system;

receiving, via the connection control system, a content delivery request containing main content identification information for identifying main content and transmitted by the user equipment, by the application server system;

selecting ~~advertisement~~sub content data stored in a storing device for storing ~~advertisement~~sub content data representing ~~advertisement~~sub content and main content data representing main content, based on ~~advertisement~~ selection information containing ~~advertisement~~ attribute information representing an attribute of ~~advertisement~~sub content; and

transmitting selected ~~advertisement~~sub content specification information

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specifying the selected ~~advertisement~~sub content data via the connection control system to the user equipment which has transmitted the content delivery request, by the application server system.

16. (Currently amended) The content delivery method according to claim 15, comprising:

receiving the selected ~~advertisement~~sub content specification information transmitted by the application server system, by the user equipment;

transmitting, to the application server system, a main content viewing request containing the main content identification information and an ~~advertisement~~sub content viewing request containing the received selected ~~advertisement~~sub content specification information, by the user equipment, when connection between the user equipment and the application server system is established by the connection control system; and

receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by main content identification information contained in the received main content viewing request to the user equipment, and receiving the ~~advertisement~~sub content viewing request transmitted by the user equipment and transmitting ~~advertisement~~sub content data specified by selected ~~advertisement~~sub content specification information contained in the received ~~advertisement~~sub content viewing request to the user equipment, by the application server system.

17. (Currently amended) The content delivery method according to claim 15 ~~or 16~~, comprising:

receiving the main content data and the ~~advertisement~~sub content data transmitted by the application server system, and outputting, based on the received

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main content data and ~~advertisement~~sub content data, viewing content in which ~~advertisement~~sub content represented by the ~~advertisement~~sub content data is inserted in main content represented by the main content data, by the user equipment.

18. (Currently amended) The content delivery method according to ~~any of claims~~claim 15 ~~to 17~~, comprising:

transmitting, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected ~~advertisement~~sub content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the ~~advertisement~~sub content specified by the selected ~~advertisement~~sub content specification information are output, by the application server system;

receiving the play-list information transmitted by the application server system, by the user equipment; and

transmitting the main content viewing request and the ~~advertisement~~sub content viewing request to the application server system based on the received play-list information, by the user equipment.

19. (Currently amended) A ~~computer program comprising instructions for causing a~~ service control server ~~to realize:~~ comprising:

a delivery request reception ~~means~~unit for receiving a content delivery request containing main content identification information for identifying main content and transmitted by a user equipment~~,~~ via a connection control system establishing connection between a media server and the user equipment;

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~~advertisement~~an sub content selection ~~means~~unit for selecting ~~advertisement~~sub content data preliminarily stored in a storing device, based on ~~advertisement~~ selection information containing ~~advertisement~~ attribute information representing an attribute of ~~advertisement~~sub content; and

a selected ~~advertisement~~sub content specification information transmission ~~means~~unit for transmitting selected ~~advertisement~~sub content specification information specifying the selected ~~advertisement~~sub content data~~,~~ via the connection control system to the user equipment which has transmitted the content delivery request.

20. (Currently amended) The ~~computer program~~service control server according to claim 19, wherein the selected ~~advertisement~~sub content specification information transmission ~~means~~unit is configured to transmit, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected ~~advertisement~~sub content specification information, and is information containing information indicating a sequence in which main content identified by the main content identification information and ~~advertisement~~sub content specified by the selected ~~advertisement~~sub content specification information are output.

21. (Currently amended) A ~~computer program comprising instructions for causing~~ user equipment ~~to realize~~comprising:

a selected ~~advertisement~~sub content specification information reception ~~means~~unit for receiving selected ~~advertisement~~sub content specification information which is information for specifying selected ~~advertisement~~sub content data and transmitted by an application server system, via a connection control system

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establishing connection between the application server system and the user equipment; and

a content viewing request transmission ~~means~~unit for transmitting, to the application server system, a main content viewing request containing main content identification information for identifying main content and an ~~advertisement~~sub content viewing request containing the received selected ~~advertisement~~sub content specification information~~,~~ when connection with the application server system is established by the connection control system.

22. (Currently amended) The ~~computer program~~ user equipment according to claim 21, further comprising ~~instructions for causing the user equipment to realize~~:

a content outputting ~~means~~unit for receiving main content data and ~~advertisement~~sub content data transmitted by the application server system, and outputting, based on the received main content data and ~~advertisement~~sub content data, viewing content in which ~~advertisement~~sub content represented by the ~~advertisement~~sub content data is inserted in main content represented by the main content data.

23. (Currently amended) The ~~computer program~~user equipment according to claim 21 ~~or 22~~, wherein:

the selected ~~advertisement~~sub content specification information reception ~~means~~unit is configured to receive play-list information which is information containing the main content identification information and the selected ~~advertisement~~sub content specification information, and containing information indicating a sequence in which main content identified by the main content identification information and ~~advertisement~~sub content specified by the selected ~~advertisement~~sub content specification information are output, and is information

transmitted by the application server system; and

the content viewing request transmission ~~means~~unit is configured to transmit the main content viewing request and the ~~advertisement~~sub content viewing request to the application server system, based on the received play-list information.

24. (New) The content delivery system according to claim 1, wherein the sub content is advertisement content.

25. (New) A content delivery system comprising an application server system and a connection control system,

the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information,

the application server system comprising:

content storage means for storing sub content data representing sub content and main content data representing main content;

delivery request reception means for receiving, via the connection control system, a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

sub content selection means for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content; and

selected sub content specification information transmission means for transmitting selected sub content specification information for specifying the selected sub content data via the connection control system to the user equipment which has transmitted the content delivery request.

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26. (New) A content delivery system comprising an application server system and a connection control system,

the connection control system comprising a core IMS (Internet Protocol Multimedia Subsystem) part for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information,

the application server system comprising:

a media functions part for transmitting content data representing content to the user equipment with which the connection is established by the core IMS part;

a service control functions part for controlling a service provided by the media functions part; and

a user profile server functions part for storing profile information of a user of the user equipment,

the media functions part comprising content storage means for storing sub content data representing sub content and main content data representing main content,

the service control functions part comprising:

delivery request reception means for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the core IMS part; and

sub content selection means for selecting the stored sub content data based on selection information containing attribute information representing an attribute of the sub content and preliminarily stored by the user profile server functions part, the service control functions part or the connection control system; and

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selected sub content specification information transmission means for transmitting selected sub content specification information for specifying the selected sub content data , via the core IMS part to the user equipment which has transmitted the content delivery request.

27. (New) A service control server comprising:

delivery request reception means for receiving a content delivery request containing main content identification information for identifying main content and transmitted by user equipment, via a connection control system establishing connection between a media server and the user equipment;

sub content selection means for selecting sub content data preliminarily stored in a storing device based on selection information containing attribute information representing an attribute of sub content; and

selected sub content specification information transmission means for transmitting selected sub content specification information specifying the selected sub content data, via the connection control system to the user equipment which has transmitted the content delivery request.

28. (New) A user equipment comprising:

selected sub content specification information reception means for receiving selected sub content specification information which is information for specifying selected sub content data and transmitted by an application server system, via a connection control system establishing connection between the application server system and the user equipment; and

content viewing request transmission means for transmitting, to the application server system, a main content viewing request containing main content identification information for identifying main content and an sub content viewing

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request containing the received selected sub content specification information, when connection with the application server system is established by the connection control system.

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CONTENT DELIVERY SYSTEM

TECHNICAL FIELD

[0001]

The present invention relates to a content delivery system transmitting content data representing content to user equipment.

BACKGROUND ART

[0002]

A content delivery system is known including a content transmitter, a content receiver, and a connection controller (SIP (Session Initiation Protocol) server).

[0003]

In this content delivery system, the content receiver transmits a content delivery request to the connection controller. In response to the content delivery request, the connection controller transmits a content delivery instruction to the content transmitter, while establishing a connection between the content transmitter and the content receiver. Further, the content delivery system executes a process to reserve a communication bandwidth of a communication channel between the content transmitter and the content receiver. Once the connection is established by the connection controller, the content transmitter transmits prestored content data to the content receiver.

[0004]

[Patent Document 1] JP 2008-153896A

SUMMARY

[0005]

In the content delivery system described above, the content transmitter transmits prestored content data in response to a request from the content receiver.

[0006]

Therefore, it is considered preferable that, in order to cause a user of the content receiver to view viewing content in which advertisement content is inserted into main content which the user desires to view (user's desired content), the content delivery system should be configured such that viewing content data representing the viewing content is previously stored

in the content transmitter.

[0007]

However, even if the content delivery system is configured in this manner, the content delivery system cannot change the advertisement content inserted into the main content according to the user's desired content and/or the user who views the content. This means that the aforementioned content delivery system is not able to cause a user to view the user's desired content and/or advertisement content selected according to the user.

[0008]

It is therefore an object of the present invention to provide a content delivery system capable of solving the problem that it is impossible to cause a user to view the user's desired content and/or advertisement content selected according to the user.

[0009]

In order to achieve the object as described above, an aspect of the present invention provides a content delivery system including an application server system and a connection control system. The connection control system is configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and the user equipment based on the received equipment specification information. The application server system includes: content storage means for storing advertisement content data representing advertisement content and main content data representing main content; delivery request reception means for receiving, via the connection control system, a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content; advertisement content selection means for selecting the stored advertisement content data based on advertisement selection information containing advertisement attribute information representing an attribute of the advertisement content; and selected advertisement content specification information transmission means for transmitting selected advertisement content specification information for specifying the selected advertisement content data , via the connection control system to the user equipment which has transmitted the content delivery request.

[0010]

Another aspect of the present invention provides a content delivery system also including an application server system and a connection control system. The connection control system includes a core IMS (Internet Protocol Multimedia Subsystem) part which is

configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and the user equipment based on the received equipment specification information. The application server system includes: a media functions part for transmitting content data representing content to the user equipment with which the connection is established by the core IMS part; a service control functions part for controlling a service provided by the media functions part; and a user profile server functions part for storing profile information of a user of the user equipment. The media functions part includes content storage means for storing advertisement content data representing advertisement content and main content data representing main content. The service control functions part includes: delivery request reception means for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the core IMS part; advertisement content selection means for selecting the stored advertisement content data based on advertisement selection information containing advertisement attribute information representing an attribute of the advertisement content and preliminarily stored by the user profile server functions part, the service control functions part or the connection control system; and selected advertisement content specification information transmission means for transmitting, via the core IMS part, selected advertisement content specification information for specifying the selected advertisement content data to the user equipment which has transmitted the content delivery request.

[0011]

Another aspect of the present invention provides a content delivery method comprising: receiving equipment specification information transmitted by user equipment and establishing connection between an application server system and the user equipment based on the received equipment specification information, by a connection control system; receiving, via the connection control system, a content delivery request containing main content identification information for identifying main content and transmitted by the user equipment, by the application server system; selecting advertisement content data stored in a storing device for storing advertisement content data representing advertisement content and main content data representing main content, based on advertisement selection information containing advertisement attribute information representing an attribute of advertisement content; and transmitting selected advertisement content specification information specifying the selected advertisement content data via the connection control system to the user equipment which has

transmitted the content delivery request, by the application server system.

[0012]

Still another aspect of the present invention provides a computer program comprising instructions for causing a service control server to realize: delivery request reception means for receiving a content delivery request containing main content identification information for identifying main content and transmitted by user equipment, via a connection control system establishing connection between a media server and the user equipment; advertisement content selection means for selecting advertisement content data preliminarily stored in a storing device based on advertisement selection information containing advertisement attribute information representing an attribute of advertisement content; and selected advertisement content specification information transmission means for transmitting selected advertisement content specification information specifying the selected advertisement content data, via the connection control system to the user equipment which has transmitted the content delivery request.

[0013]

Still another aspect of the present invention provides a computer program comprising instructions to cause user equipment to realize: selected advertisement content specification information reception means for receiving selected advertisement content specification information which is information for specifying selected advertisement content data and transmitted by an application server system, via a connection control system establishing connection between the application server system and the user equipment ; and content viewing request transmission means for transmitting, to the application server system, a main content viewing request containing main content identification information for identifying main content and an advertisement content viewing request containing the received selected advertisement content specification information, when connection with the application server system is established by the connection control system.

[0014]

The present invention configured as described above is capable of allowing a user to view the user's desired content and/or advertisement content selected according to the user.

BRIEF DESCRIPTION OF DRAWINGS

[0015]

Fig. 1 is a diagram illustrating a schematic configuration of a content delivery system

according to a first embodiment of the present invention;

Fig. 2 is a block diagram schematically illustrating functions of the content delivery system shown in Fig. 1;

Fig. 3 is a table illustrating user basic information stored in the user information management server shown in Fig. 1;

Fig. 4 is a sequence diagram illustrating operation performed by the content delivery system shown in Fig. 1 when authenticating user equipment or a user of the user equipment;

Fig. 5 is a sequence diagram illustrating operation performed by the content delivery system shown in Fig. 1 when transmitting viewing content data to a user equipment in response to an input of the user of the user equipment;

Fig. 6 is a sequence diagram illustrating operation performed by the content delivery system shown in Fig. 1 when transmitting viewing content data to the user equipment in response to an input of the user of the user equipment;

Fig. 7 is a diagram showing an INVITE message containing a content delivery instruction;

Fig. 8 is a diagram showing an INVITE message containing a content delivery instruction according to a modification of the first embodiment;

Fig. 9 is a diagram showing an INVITE message containing a content delivery instruction according to a modification of the first embodiment;

Fig. 10 is a diagram showing an INVITE message containing a content delivery instruction according to a modification of the first embodiment;

Fig. 11 is a diagram showing an INVITE message containing a content delivery instruction according to a modification of the first embodiment;

Fig. 12 is a sequence diagram showing operation performed by a content delivery system according to a first modification of the first embodiment when transmitting viewing content data to the user equipment in response to an input of the user of the user equipment;

Fig. 13 is a sequence diagram showing operation performed by a content delivery system according to a second modification of the first embodiment when transmitting viewing content data to the user equipment in response to an input of the user of the user equipment;

Fig. 14 is a block diagram schematically illustrating a content delivery system according to a second embodiment of the present invention;

Fig. 15 is a sequence diagram showing operation performed by the content delivery

system according to the second embodiment of the invention when transmitting viewing content data to the user equipment in response to an input of the user of the user equipment;

Fig. 16 is a diagram showing an INVITE message containing a content delivery instruction according to the second embodiment of the present invention;

Fig. 17 is a block diagram schematically illustrating functions of a content delivery system according to a third embodiment of the present invention;

Fig. 18 is a sequence diagram illustrating operation performed by the content delivery system according to the third embodiment of the present invention when transmitting viewing content data to the user equipment in response to an input of the user of the user equipment;

Fig. 19 is a diagram showing an INVITE message containing a content delivery instruction according to the third embodiment of the present invention; and

Fig. 20 is a block diagram schematically illustrating functions of a content delivery system according to a fourth embodiment of the present invention.

EXEMPLARY EMBODIMENTS

[0016]

Exemplary preferred embodiments of a content delivery system, a content delivery method, and a computer program according to the present invention will be described with reference to Figs. 1 to 20.

[0017]

<First Embodiment>

(Configuration)

As illustrated in Fig. 1, a content delivery system 1 according to a first embodiment is a Video-on-Demand system. Alternatively, the content delivery system 1 may be an IPTV (Internet Protocol Television) system for broadcasting content.

[0018]

The content delivery system 1 includes a connection control system 3 and an application server system 4. The connection control system 3 includes a plurality of servers including a connection control server 3a and a connection control server 3b. The application server system 4 includes a plurality of servers including a service control server 4a, a media server 4b, and a user information management server 4c.

[0019]

The connection control server 3a is communicably connected to user equipment (UE) 2 through user communication lines NW1 forming an IP (Internet Protocol) network. The connection control server 3b and the application server system 4 are communicably connected to each other through service provider communication lines NW2 forming the IP network.

[0020]

The user equipment 2 has a set-top box and a remote controller (both not shown). The set-top box is connected to a television receiver (not shown). The set-top box receives content data representing content transmitted from the media server 4b (here, the content is a video consisting of sound and images), and outputs the content to the television receiver by converting the received content data.

[0021]

The remote controller has a plurality of buttons (button switches). When a button is pressed by a user, the remote controller transmits an infrared signal corresponding to the pressed button to the set-top box. The set-top box accepts information input by the user by receiving the infrared signal from the remote controller.

[0022]

The user equipment 2 stores equipment specification information for specifying the equipment (local terminal) in a memory serving as a storing device.

[0023]

The connection control server 3a, the connection control server 3b, the service control server 4a, the media server 4b, and the user information management server 4c (servers 3a to 4c) each have a central processing unit (CPU) (not shown), and a storing device (memory and hard disk drive (HDD)) (not shown). Each of the servers 3a to 4c is configured to realize functions described below by the CPU executing a program stored in the storing device.

[0024]

The connection control server 3a and the connection control server 3b are configured to control connection between a plurality of devices by exchanging (receiving and transmitting) a SIP message (message according to Session Initiation Protocol). In other words, each of the connection control server 3a and the connection control server 3b is a SIP server.

[0025]

The connection control system 3 is configured to establish, upon receiving a SIP message containing equipment specification information transmitted by the user equipment 2,

connection (session) between the application server system 4 and the user equipment 2 based on the equipment specification information contained in the received SIP message.

[0026]

The service control server 4a controls a service provided by the media server 4b (service to transmit content data). The media server 4b transmits content data representing content to the user equipment 2 with which the connection is established by the connection control system 3. The user information management server 4c preliminarily stores profile information of the user of the user equipment 2, and transmits the stored profile information to the service control server 4a.

[0027]

(Functions)

Fig. 2 is a block diagram illustrating functions of the content delivery system 1 configured as described above.

[0028]

(Functions of User Equipment)

Functions of the user equipment 2 include a request transmitter 11, a play-list receiver (selected advertisement content specification information reception means) 12, a viewing request transmitter (content viewing request transmission means) 13, and a content outputting part (content outputting means) 14.

[0029]

The request transmitter 11 transmits, to the connection control server 3a, a SIP message as an equipment authentication request containing the stored equipment specification information, when the state of a power switch of the user equipment 2 is set to ON state (when power is supplied).

[0030]

The request transmitter 11 receives a SIP message containing equipment authentication success information from the connection control system 3. The equipment authentication success information is information containing equipment address information representing a position of the equipment in the IP network, and indicating that the user equipment 2 located at the position represented by the equipment address information is authenticated to be valid equipment.

[0031]

Further, the request transmitter 11 transmits, to the connection control system 3, a SIP message containing user authentication information received from the user of the user equipment 2 via the remote controller, as a user authentication request. In this example, the user authentication information consists of user identification information representing a character string for identifying the user of the user equipment 2, and password information representing a character string as a password.

[0032]

The request transmitter 11 also receives a SIP message containing user authentication success information from the connection control system 3. The user authentication success information is information containing user identification information, and indicating that the user identified by the user identification information (i.e., the user who has input the user authentication information) is a valid user.

[0033]

Upon receiving the user authentication success information from the connection control system 3, the request transmitter 11 transmits to the connection control system 3 a SIP message containing a process request for requesting the application server system to execute the process, in response to a request transmission instruction input by the user of the user equipment 2. The process request contains user authentication success information (i.e., user identification information).

[0034]

The play-list receiver 12 receives play-list information transmitted by the application server system 4 (service control functions part 40 to be described later) via the connection control system 3 (core IMS part 30 to be described later).

[0035]

In this example, the play-list information contains a plurality of pieces of content element information each formed by a set consisting of content identification information for identifying content, and a reproduction start position and reproduction end position of the content identified by the content identification information. The content identification information as used herein is main content identification information for identifying main content or advertisement content identification information (selected advertisement content specification information) for identifying advertisement content.

[0036]

Further, the play-list information is information containing information indicating a sequence in which the pieces of content (the main content identified by the main content identification information and the advertisement content specified by the selected advertisement content specification information) are output (content output sequence).

[0037]

The viewing request transmitter 13 transmits the main content viewing request and the advertisement content viewing request to the application server system 4 based on the play-list information received by the play-list receiver 12, if the connection between the user equipment 2 and the application server system 4 is established by the connection control system 3 (core IMS part 30 to be described later).

[0038]

The main content viewing request contains main content identification information and a reproduction start position. The advertisement content viewing request contains advertisement content identification information (selected advertisement content specification information) and a reproduction start position.

[0039]

Specifically, the viewing request transmitter 13 transmits a content viewing request (main content viewing request or advertisement content viewing request), one at a time, at a predetermined timing according to the content output sequence indicated by the play-list information received by the play-list receiver 12.

[0040]

In this example, when the reproduction position of content that is being output by a content outputting part 14 (to be described later) reaches a position located before the reproduction end position associated with the content in the play-list information by a predetermined period of time, the viewing request transmitter 13 transmits to the application server system 4 a content viewing request relating to content defined in the play-list information to be output next to the content that is currently being output.

[0041]

Further, when the reproduction position of the content that is being output by the content outputting part 14 (to be described later) reaches the reproduction end position associated with the content in the play-list information, the viewing request transmitter 13 transmits to the application server system 4 a reproduction stop request for requesting stopping transmission of

content data representing the content, and at the same time transmits to the application server system 4 a reproduction start request for requesting starting transmission of content data representing content defined in the play-list information to be output next to the content that is being currently output.

[0042]

The content outputting part 14 receives content data transmitted by the application server system 4 and outputs content represented by the received content data (in this example, the content is output by a television receiver). It can be said specifically that the content outputting part 14 receives main content data and advertisement content data and outputs, based on the received main content data and advertisement content data, viewing content in which advertisement content represented by the advertisement content data is inserted in main content represented by the main content data.

[0043]

(Functions of Connection Control System)

Functions of the connection control system 3 include a core IMS (Internet Protocol Multimedia Subsystem) part 30 and a transport functions (TF) part 80.

[0044]

The core IMS part 30 includes a call connection controller 31 and an IMS authentication part (user authentication means) 32. The transport functions part 80 includes a bandwidth guarantee part 81 and an equipment authentication part 82.

[0045]

The call connection controller 31 controls connection between a plurality of devices by exchanging (receiving and transmitting) a SIP message.

[0046]

When the connection control server 3a receives an equipment authentication request from the user equipment 2, the equipment authentication part 82 authenticates whether or not the user equipment 2 is a valid equipment (executes an equipment authentication process) by determining whether or not equipment specification information contained in the received equipment authentication request corresponds to (coincides with, in this example) equipment authentication reference information. The equipment authentication reference information as used herein is information that is preliminarily stored in a storing device provided in the connection control server 3a. The equipment authentication reference information may be

stored in a storing device (user profile server functions part 50 to be described later) provided in the user information management server 4c.

[0047]

If the user equipment 2 is authenticated to be valid equipment, the equipment authentication part 82 transmits a SIP message containing equipment authentication success information to the user equipment 2.

When the user equipment 2 is authenticated to be a valid equipment by the equipment authentication part 82, the call connection controller 31 subsequently executes a process based on the message (process request or the like) transmitted from the user equipment 2 (for example, a process to transfer the message to the application server system 4).

[0048]

On the other hand, if the user equipment 2 is not authenticated to be valid equipment by the equipment authentication part 82, the call connection controller 31 does not execute the process based on the message (process request or the like) transmitted from the user equipment 2 from then onward.

[0049]

Further, when the connection control server 3a receives a user authentication request from the user equipment 2, the IMS authentication part 32 authenticates whether or not the user who has input the user authentication information (the user identified by the user identification information contained in the user authentication information) is a valid user (whether or not the user identified by the user identification information coincides with the user of the user equipment 2) by determining whether or not the user authentication information contained in the user authentication request corresponds to user authentication reference information (executes user authentication). The user authentication reference information as used herein is information that is preliminarily stored in the storing device (user profile server functions part 50 to be described later) provided in the user information management server 4c. This means that the user profile server functions part 50 constitutes user authentication reference information storage means.

[0050]

When the user who has input the user authentication information is authenticated to be a valid user by the IMS authentication part 32, the call connection controller 31 transmits a SIP message containing user authentication success information to the user equipment 2. However,

if the user who has input the user authentication information is not authenticated to be a valid user by the IMS authentication part 32, the call connection controller 31 does not transmit a SIP message containing user authentication success information to the user equipment 2.

[0051]

Upon receiving a bandwidth guarantee instruction from the service control server 4a, the call connection controller 31 establishes connection between the media server 4b and the user equipment 2. The bandwidth guarantee instruction contains media delivery specification information for specifying the media server 4b, and communication bandwidth information representing a communication bandwidth. The call connection controller 31 transmits, to the transport functions part 80, the received communication bandwidth information and communication channel specification information for specifying a communication channel between the user equipment 2 and the media server 4b specified by the received media delivery specification information.

[0052]

The bandwidth guarantee part 81 receives the communication bandwidth information and the communication channel specification information from the call connection controller 31, and executes a process to guarantee a communication bandwidth represented by the communication bandwidth information for a communication channel specified by the received communication channel specification information (bandwidth guarantee process).

[0053]

(Functions of User Information Management Server)

Functions of the user information management server 4c include a user profile server functions (UPSF) part 50.

The user profile server functions part 50 stores profile information of the user of the user equipment 2. The user profile server functions part 50 includes a user basic information storage 51.

[0054]

The user basic information storage 51 stores user basic information in association with the user identification information for identifying the user of the user equipment 2. The user basic information is information for specifying advertisement attribute information representing an attribute of advertisement content (in this example, categories of advertisement content such as cars, real estate, travel, insurance, cell-phones, coffee, gadgets and so on). In this example,

the user basic information contains, as shown in Fig. 3, a plurality of information sets consisting of advertisement attribute information and priority information representing priority levels (in this example, indicated by integer values which increase as the priority level rises). The user basic information forms part of advertisement selection information.

[0055]

(Functions of Service Control Server)

Functions of the service control server 4a include a service control functions (SCF) part 40.

[0056]

The service control functions part 40 includes an information transmitter-receiver (delivery request reception means and selected advertisement content specification information transmission means) 41, a content basic information storage 42, an advertisement attribute information storage (part of content storage means, or part of a content storing processing step) 43, an advertisement insertion information storage 44, a play-list generator (advertisement content selection means) 45, and a delivery requesting part 46.

[0057]

The information transmitter-receiver receives various information (request, instruction, notification, and so on) transmitted by the user equipment 2 or the media server 4b via the core IMS part 30 (routed through the core IMS part 30). Further, the information transmitter-receiver 41 transmits various information to the user equipment 2 or the media server 4b via the core IMS part 30. In this example, the various information is contained in the SIP message.

[0058]

Only when the service control server 4a receives a process request containing user authentication success information from the user equipment 2, the service control server 4a executes a process according to the process request. Thus, it can be said that the application server system 4 executes a process according to the process request when the user who has input the user authentication information is authenticated to be a valid user by the IMS authentication part 32.

[0059]

The content basic information storage 42 stores the content basic information in association with main content identification information for identifying the main content. The

content basic information is information for specifying advertisement attribute information. In this example, like the user basic information, the content basic information includes a plurality of information sets consisting of advertisement attribute information and priority information representing priority levels. The content basic information forms part of the advertisement selection information.

[0060]

The advertisement attribute information storage 43 stores advertisement content identification information for identifying advertisement content in association with the advertisement attribute information.

[0061]

The advertisement insertion information storage 44 stores the main content identification information, number-of-insertions information, and inserting position information in association with each other. The number-of-insertions information is information representing a number of insertions that is a number of items of advertisement content inserted in the main content. The inserting position information is information representing an inserting position that is a position in the main content where the advertisement content is to be inserted (in this example, it is indicated by a play time from the beginning of the main content).

[0062]

The play-list generator 45 accepts a content delivery request received by the information transmitter-receiver 41 as a process request. The content delivery request is information transmitted by the user equipment 2 and containing user authentication success information (i.e., user identification information), equipment address information, and main content identification information.

[0063]

The play-list generator 45 acquires, from the user basic information stored in the user basic information storage 51, user basic information stored in association with the user identification information contained in the content delivery request received by the information transmitter-receiver 41.

[0064]

Further, the a play-list generator 45 acquires, from the content basic information stored in the content basic information storage 42, content basic information stored in association with the main content identification information contained in the content delivery request.

[0065]

The play-list generator 45 then calculates a final priority level for each item of the advertisement attribute information by combining a priority level represented by the priority information contained in the acquired user basic information and a priority level represented by the priority information contained in the acquired content basic information for each item of the advertisement attribute information.

[0066]

Subsequently, the play-list generator 45 extracts, from the advertisement content identification information stored in the advertisement attribute information storage 43, advertisement content identification information associated with the item of advertisement attribute information the calculated final priority level of which is the highest.

[0067]

On the other hand, the play-list generator 45 acquires, from the number-of-insertions information and the insertion position information stored in the advertisement insertion information storage 44, number-of-insertions information and insertion position information stored in association with the main content identification information contained in the content delivery request.

[0068]

The play-list generator 45 then selects, from the extracted advertisement content identification information, a number of items of advertisement content identification information, the number being that represented by the acquired number-of-insertions information.

Thus, it can be said that the play-list generator 45 selects advertisement content data stored in association with the advertisement attribute information specified on the basis of the user basic information associated with the user identification information for identifying the user of the user equipment 2 which has transmitted the content delivery request and the content basic information associated with the main content identification information contained in the content delivery request.

[0069]

Subsequently, the play-list generator 45 generates play-list information on the basis of the selected advertisement content identification information (that is, selected advertisement content specification information for specifying the advertisement content data which is selected), the main content identification information contained in the content delivery request and the

acquired insertion position information.

[0070]

Thus, it can be said that the play-list information is information containing the main content identification information contained in the content delivery request and the selected advertisement content specification information specifying the advertisement content data selected by the play-list generator 45.

[0071]

The delivery requesting part 46 outputs a content delivery instruction. The content delivery instruction contains the play-list information generated by the play-list generator 45, the user authentication success information contained in the content delivery request (i.e., user identification information), the equipment address information, and the main content identification information.

[0072]

The information transmitter-receiver 41 transmits the content delivery instruction output by the delivery requesting part 46 to the media server 4b via the core IMS part 30.

Further, upon receiving a delivery permission notification transmitted by the media server 4b, the information transmitter-receiver 41 transmits the play-list information generated by the play-list generator 45 to the user equipment 2 via the core IMS part 30. The delivery permission notification contains media delivery specification information for specifying a media server (in this example, the media server 4b) and the play-list information.

[0073]

(Functions of Media Server)

Functions of the media server 4b include a media functions (MF) part 60. The media functions part 60 includes a media control functions (MCF) part and a media delivery functions (MDF) part.

[0074]

The media functions part 60 includes an information transmitter-receiver 61, a content data storage (part of content storage means, and part of a content storing processing step) 62, a content delivery controller 63, and a content delivering part (content delivering means) 65.

[0075]

The information transmitter-receiver 61 receives various information transmitted by the service control server 4a via the core IMS part 30. Specifically, the information

transmitter-receiver 61 receives a content delivery instruction and so on transmitted by the service control server 4a via the core IMS part 30. The information transmitter-receiver 61 transmits the various information to the service control server 4a via the core IMS part 30. More specifically, the information transmitter-receiver 61 transmits a delivery permission notification and so on to the service control server 4a via the core IMS part 30.

[0076]

The content data storage 62 stores main content data representing main content and main content identification information for identifying the main content in association with each other. Further, the content data storage 62 stores advertisement content data representing advertisement content and advertisement content identification information for identifying the advertisement content in association with each other.

[0077]

The content delivery controller 63 receives a main content viewing request from the user equipment 2. The main content viewing request contains main content identification information, a reproduction start position, and user identification information. The content delivery controller 63 also receives an advertisement content viewing request from the user equipment 2. The advertisement content viewing request contains advertisement content identification information, a reproduction start position, and user identification information.

[0078]

The content delivery controller 63 receives a reproduction start request from the user equipment 2. In addition, the content delivery controller 63 receives a reproduction stop request from the user equipment 2.

[0079]

Once a reproduction start request is received by the content delivery controller 63, the content delivering part 65 transmits the content data identified by the content delivery request to the user equipment 2 from the reproduction start position contained in the content viewing request.

[0080]

The content delivering part 65 transmits the data using a session established by the core IMS part 30, according to a predetermined communication protocol (in this example, RTP (Real-time Transport Protocol)).

[0081]

Thus, it can be said that the content delivering part 65 transmits content data stored by the content data storage 62 (main content data and advertisement content data) to the user equipment 2 which has transmitted the content delivery request if the connection between the user equipment 2 and the media server 4b is established by the connection control system 3.

[0082]

Once a reproduction stop request is received by the content delivery controller 63, the content delivering part 65 stops transmitting the content data which is being transmitted.

[0083]

(Operation)

Next, operation of the aforementioned content delivery system 1 will be described.

[0084]

(Authentication Operation)

Operation of the content delivery system 1 when the content delivery system 1 authenticates the user of the user equipment 2 will be described with reference to the sequence diagram of Fig. 4.

[0085]

Firstly, power is supplied to the user equipment 2 by the user setting the state of the power switch of the equipment 2 to ON state. This causes the user equipment 2 to transmit an equipment authentication request containing the stored equipment specification information to the connection control server 3a (transport functions part 80) (step A401).

[0086]

The transport functions part 80 authenticates whether or not the user equipment 2 is valid equipment (executes an equipment authentication process) by determining whether or not the equipment specification information contained in the received equipment authentication request corresponds to (in this example, coincides with) the preliminarily stored equipment authentication reference information (step B401). If the user equipment 2 is authenticated to be valid equipment, the transport functions part 80 then transmits equipment authentication success information to the user equipment 2 (step B402). The equipment authentication success information is information containing equipment address information and representing that the user equipment 2 is authenticated to be valid equipment.

[0087]

Upon receiving the equipment authentication success information, the user equipment 2

causes a television receiver (not shown) to display an image to prompt the user UA to input user authentication information. In response to this, the user UA inputs the user authentication information by manipulating a remote controller.

[0088]

Upon accepting the input of the user authentication information, the user equipment 2 transmits a user authentication request containing the accepted user authentication information to the core IMS part 30 (step A402).

[0089]

Thus, the core IMS part 30 receives the user authentication request. The core IMS part 30 determines whether or not the user authentication information contained in the received user authentication request corresponds to (in this example, coincides with) the preliminarily stored user authentication reference information, whereby it is authenticated whether or not the user identified by the user identification information contained in the user authentication reference information (the user who has input the user authentication information) is a valid user (executes a user authentication process) by (step B403, user authentication). If the user who has input the user authentication information is authenticated to be a valid user, the core IMS part 30 transmits user authentication success information to the user equipment 2 (step B404).

[0090]

Thus, the user equipment 2 receives the user authentication success information. After that, the user equipment 2 transmits a process request (a SIP message containing the same) containing the user authentication success information to the core IMS part 30.

[0091]

(Operation of Content Viewing Process)

Next, operation of the content delivery system 1 when transmitting content data to the user equipment 2 in response to an input by a user of the user equipment 2 will be described with reference to the sequence diagrams of Figs. 5 and 6.

[0092]

Firstly, the user of the user equipment 2 inputs to the user equipment 2 information for instructing the user equipment to transmit a process request requesting transmission of content list information representing a list of viewable content. In response to this, the user equipment 2 transmits the process request to the service control server 4a (service control functions part 40) via the core IMS part 30.

[0093]

The service control functions part 40 transmits content list information representing a list of main content represented by the main content data stored in the content data storage 62 to the user equipment 2 via the core IMS part 30. Upon receiving the content list information, the user equipment 2 causes a television receiver (not shown) to display the list of the main content represented by the received content list information.

[0094]

The content delivery system 1 may be configured such that the content list information is transmitted to the user equipment 2 from a portable server (not shown) which is configured to be communicable with the user equipment 2 according to HTTP (Hypertext Transfer Protocol).

[0095]

With the list of main content being displayed on the television receiver, the user of the user equipment 2 selects main content that the user wishes to view, and inputs main content identification information for identifying the selected main content.

[0096]

Thus, as shown in Fig. 5, the user equipment 2 transmits to the core IMS part 30 a content delivery request as a process request containing the input main content identification information, user authentication success information as the user identification information for identifying the user, and equipment address information (step A501). The content delivery request is transmitted as an INVITE message (message in which "INVITE" is set as the method) of a SIP message.

[0097]

The core IMS part 30 thus receives the content delivery request. Subsequently, the core IMS part 30 executes a bandwidth reservation process as preparation for guaranteeing a communication bandwidth. The core IMS part 30 then transmits the received content delivery request to the service control functions part 40 (step B501).

[0098]

Subsequently, the service control functions part 40 receives the content delivery request (delivery request reception step). The service control functions part 40 acquires user basic information and content basic information on the basis of the user identification information and main content identification information contained in the received content delivery request.

[0099]

The service control functions part 40 then calculates a final priority level for each item of the advertisement attribute information based on the acquired user basic information and the acquired content basic information. The service control functions part 40 extracts from the advertisement content identification information stored in the advertisement attribute information storage 43, advertisement content identification information associated with the item of advertisement attribute information the calculated final priority level of which is the highest.

[0100]

On the other hand, the service control functions part 40 acquires, from the number-of-insertions information and the insertion position information stored in the advertisement insertion information storage 44, number-of-insertions information and insertion position information stored in association with the main content identification information contained in the content delivery request.

[0101]

The service control functions part 40 then selects from the extracted advertisement content identification information, a number of items of advertisement content identification information, the number being that represented by the acquired number-of-insertions information (advertisement content selection step). Subsequently, the service control functions part 40 generates play-list information on the basis of the selected advertisement content identification information, the main content identification information contained in the content delivery request and the acquired insertion position information (step C501). The play-list information is information containing the main content identification information and the selected advertisement content specification information.

[0102]

The service control functions part 40 then selects a media server 4b (media functions part 60), and transmit the content delivery instruction to the selected media functions part 60 via the core IMS part 30 (step C502). The content delivery instruction contains the generated play-list information, the user identification information, and the equipment address information.

[0103]

The content delivery instruction is transmitted as an INVITE message of a SIP message. As shown in Fig. 7, the INVITE message includes a header HD and a body BD. In this example, the play-list information PL is contained as values in the field of "X-video-sequence" in the header HD of the INVITE message.

[0104]

In this example, the play-list information PL includes five portions of content element information separated with commas. The first portion of the content element information is formed of a set of values separated with semicolons and consisting of "content1" as the main content identification information, "0" as the reproduction start position of the main content, and "300" as the reproduction end position of the main content. The second portion of the content element information is formed of a set of values separated with semicolons and consisting of "adv1" as the advertisement content identification information, "0" as the reproduction start position of the advertisement content, and "30" as the reproduction end position of the advertisement content. The third to fifth portions of the content element information are formed in the same manner as the first and second portions of the content element information.

[0105]

The media functions part 60 thus receives the content delivery instruction. Subsequently, the media functions part 60 determines a media server to which the content data is to be transmitted on the basis of the play-list information and the equipment address information contained in the content delivery instruction. Further, the media functions part 60 transmits a delivery permission notification to the service control functions part 40 via the core IMS part 30 (step D501).

[0106]

The delivery permission notification contains media delivery specification information for specifying the determined media server (in this example, the media server 4b), and the play-list information. The delivery permission notification is transmitted as an OK message (response containing "OK" and "200" as a status code in the start line) of a SIP message.

[0107]

Thus, the service control functions part 40 receives the media delivery specification information and the play-list information. The service control functions part 40 then determines a communication bandwidth required for transmitting the main content data identified by the play-list information, on the basis of the received media delivery specification information and play-list information.

[0108]

Further, the service control functions part 40 transmits, to the core IMS part 30, a bandwidth guarantee instruction containing communication bandwidth information indicating

the determined communication bandwidth, and the received media delivery specification information and play-list information (step C503). The bandwidth guarantee instruction is transmitted as an OK message of a SIP message.

[0109]

Upon receiving the bandwidth guarantee instruction, the core IMS part 30 transmits, to the transport functions part 80, the received communication bandwidth information and communication channel specification information for specifying a communication channel between the user equipment 2 and the media server 4b specified by the received media delivery specification information. Thus, the transport functions part 80 executes a process to guarantee the communication bandwidth represented by the received communication bandwidth information on the communication channel specified by the received communication channel specification information (bandwidth guarantee process).

[0110]

Upon completing the bandwidth guarantee process, the core IMS part 30 transmits a transmission preparation completion notification to the user equipment 2 (step B502). The transmission preparation completion notification contains the received media delivery specification information and play-list information. The transmission preparation completion notification is transmitted as an OK message of a SIP message.

[0111]

As described above, the OK message transmitted as a bandwidth guarantee instruction or transmission preparation completion notification is one of connection establishment messages which the core IMS part 30 exchanges with the user equipment 2, the service control functions part 40 and the media functions part 60 in order to establish connection between the user equipment 2 and the media functions part 60.

[0112]

Thus, it can be said that the service control functions part 40 transmits the selected advertisement content specification information to the user equipment 2 via the core IMS part 30 by incorporating the selected advertisement content specification information in the connection establishment message (selected advertisement content specification information transmission step).

[0113]

It can be said, in other words, that the service control functions part 40 transmits

play-list information containing the selected advertisement content specification information to the user equipment 2 via the core IMS part 30 when the core IMS part 30 executes a process for establishing connection between the user equipment 2 and the media functions part 60.

[0114]

Upon receiving the transmission preparation completion notification (selected advertisement content specification information reception step), the user equipment 2 transmits a connection preparation completion notification to the service control functions part 40 via the core IMS part 30 (step A502). The connection preparation completion notification is transmitted as an ACK message (message in which "ACK" is set as the method) of a SIP message.

[0115]

Upon receiving the connection preparation completion notification, the service control functions part 40 transmits a connection preparation completion notification that is the same as the received connection preparation completion notification to the media functions part 60 via the core IMS part 30 (step C504). This connection preparation completion notification is also transmitted as an ACK message of a SIP message.

[0116]

The connection (session) between the media server 4b and the user equipment 2 is established by the media functions part 60 receiving the connection preparation completion notification (step E501). The processes in step A501 to step E501 together make up a connection establishment step. It can be said that the core IMS part 30 establishes the connection between the media server 4b (media functions part 60) and the user equipment 2 by relaying the SIP message.

[0117]

It can also be said that the SIP message which the connection control system 3 (core IMS part 30) exchanges with the user equipment 2, the service control server 4a and the media server 4b in step A501 to step E501 is a connection establishment message for the connection control system 3 establishing connection between the user equipment 2 and the media server 4b.

[0118]

In this example, both of the connection for performing communication according to RTSP (Real Time Streaming Protocol) and the connection for performing communication according to RTP are established simultaneously.

[0119]

As shown in Fig. 6, the user equipment 2 then transmits a content viewing request based on the play-list information PL contained in the received transmission preparation completion notification to a media server 4b (media functions part 60) specified by the media delivery specification information contained in the received transmission preparation completion notification (content viewing request transmission step).

[0120]

More specifically, the user equipment 2 firstly transmits, to the media functions part 60, a content viewing request (main content viewing request, in this example) containing content identification information ("content1" in this example) contained in the leading portion of the content element information (i.e., first portion of the content element information) in the play-list information PL, and the reproduction start position ("0" in this example) contained in that portion of the content element information (step A503).

[0121]

The content viewing request further contains user identification information for identifying a user of the user equipment 2. The content viewing request is transmitted as a SETUP message (message in which "SETUP" is set as the method) of a RTSP message (message according to RTSP).

[0122]

The media functions part 60 then receives the content viewing request. Subsequently, the media functions part 60 acquires, from the advertisement content data and main content data stored in the content data storage 62, content data identified by the content identification information contained in the received content viewing request.

[0123]

The media functions part 60 then transmits a content delivery preparation completion notification to the user equipment 2 which has transmitted the content viewing request (step D502). The content delivery preparation completion notification is transmitted as an OK message (response containing "OK" and "200" as a status code in the start line) of a RTSP message.

[0124]

Upon receiving the content delivery preparation completion notification, the user equipment 2 transmits, to the media functions part 60, a reproduction start request for the content

relating to the content viewing request transmitted in step A503 (here, the main content identified by "content1" of the main content identification information) (step A504). The reproduction start request is transmitted as a PLAY message (message in which "PLAY" is set as the method) of a RTSP message.

[0125]

Subsequently, upon receiving the reproduction start request, the media functions part 60 transmits a reproduction start notification to the user equipment 2 (step D503). The reproduction start notification is information indicating that transmission of the content data is started. The reproduction start notification is transmitted as an OK message of a RTSP message.

[0126]

The media functions part 60 then transmits the content data identified by the received content viewing request (here, the main content data) to the user equipment 2 from the reproduction start position ("0" in this example) (step D504, content delivery step). This transmission of the data is performed by the media functions part 60 using the session established by the core IMS part 30 according to RTP.

[0127]

Thus, the user equipment 2 receives the content data and causes the television receiver (not shown) to display the content represented by the received content data (here, the main content identified by the main content identification information "content1") (content output step).

[0128]

After that, when the reproduction position of the content that is being output reaches a position located before the reproduction end position associated with this content in the play-list information PL ("300" in this example) by a predetermined period of time, the user equipment 2 transmits, to the media functions part 60, a content viewing request (advertisement content viewing request, in this example) containing content identification information ("adv1" in this example) contained in the content element information located next to the content element information relating to the content that is being output in the play-list information PL (that is, the second portion of the content element information), and a reproduction start position contained in that content element information ("0" in this example) (step A505).

[0129]

The media functions part 60 receives the content viewing request. Subsequently, the media functions part 60 transmits a content delivery preparation completion notification to the user equipment 2 which has transmitted the content viewing request, in the same manner as in step D502 described above (step D505).

[0130]

When the reproduction position of the content which is being output reaches the reproduction end position associated with the content in the play-list information PL ("300" in this example), the user equipment 2 transmits, to the media functions part 60, a reproduction stop request for requesting stopping transmission of the content data representing that content (i.e. the main content) (step A506). The reproduction stop request is transmitted as a PAUSE message (message in which "PAUSE" is set as the method) of a RTSP message.

[0131]

Subsequently, upon receiving the reproduction stop request, the media functions part 60 stops transmission of the content data.

[0132]

Further, the user equipment 2 transmits to the media functions part 60 a reproduction start request for requesting reproduction of the content relating to the content viewing request transmitted in step A505 described above (here, the advertisement content identified by the advertisement content identification information "adv1") (step A507).

[0133]

Subsequently, upon receiving the reproduction start request, the media functions part 60 transmits a reproduction start notification to the user equipment 2 (step D506). The media functions part 60 then transmits the content data identified by the received content viewing request (here, the advertisement content data) to the user equipment 2 from the reproduction start position contained in the content viewing request ("0" in this example) (step D507, content delivery step).

[0134]

Thus, the user equipment 2 receives the content data and causes a television receiver (not shown) to display the content represented by the received content data (here, the advertisement content identified by the advertisement content identification information "adv1").

[0135]

By repeatedly performing the processes as described above, the user equipment 2 outputs, based on the play-list information PL, the viewing content in which the advertisement content represented by the advertisement content data is inserted in the main content represented by the main content data.

[0136]

According to the first embodiment of the content delivery system of the invention, the content delivery system 1 transmits to the user equipment 2 selected advertisement content specification information for selecting advertisement content selected based on advertisement selection information. Accordingly, it is possible to cause the user to view viewing content in which advertisement content corresponding to the advertisement selection information is inserted.

[0137]

Further, according to the first embodiment described above, the application server system 4 can be allowed to determine a sequence in which the main content and the advertisement content are output by the user equipment 2. This makes it possible to cause the user to view the advertisement content in such a manner that the intent of an advertiser who provides the advertisement content is reflected more clearly.

[0138]

Further, in the first embodiment described above, the advertisement selection information contains user basic information associated with the user identification information. This enables the content delivery system 1 to cause a user of the user equipment 2 which has transmitted a content delivery request to view viewing content in which advertisement content according to the user is inserted.

[0139]

In addition, in the first embodiment described above, the advertisement selection information contains the content basic information associated with the main content identification information. This enables the content delivery system 1 to cause the user to view the viewing content in which the advertisement content selected according to the main content identified by the main content identification information contained in the received content delivery request is inserted.

[0140]

Further, in the first embodiment, the service control functions part 40 is

configured to transmit play-list information containing selected advertisement content specification information to the user equipment 2 via the connection control system 3 when the connection control system 3 executes a process for establishing connection. This enables the service control server 4a to transmit to the user equipment 2 the play-list information in which the latest advertisement selection information at the time when the connection control system 3 executes a process for establishing connection is reflected.

[0141]

In addition, in the first embodiment described above, the service control functions part 40 is configured to transmit play-list information containing selected advertisement content specification information to the user equipment 2 via the connection control system 3 by incorporating the play-list information into a connection establishment message.

[0142]

According to this configuration, no other message than the connection establishment message need be transmitted for the service control server 4a transmitting the play-list information to the user equipment 2. This means that the number of communications can be reduced among the connection control system 3, the service control server 4a and the user equipment 2. In other words, the processing load and/or communication load required for the connection control system 3, the service control server 4a and the user equipment 2 to exchange messages can be relieved.

[0143]

Although in the first embodiment described above, the play-list information is contained in the header HD of the INVITE message, the play-list information may be contained in the start line (Request-Line) of the INVITE message. For example, as shown in Fig. 8, the play-list information PL may be contained in the Request-URI (Uniform Resource Identifier) in the start line.

[0144]

Although in the first embodiment described above, the play-list information is contained in the header HD of the INVITE message, the play-list information may be contained in the body BD of the INVITE message. For example, as shown in Fig. 9, the play-list information PL may be contained in the body BD as a value of "videosequence" in the values of type "a" in SDP (Session Description Protocol).

[0145]

Further, although in the first embodiment described above, the play-list information is contained in the header HD of an INVITE message, the body BD of the INVITE message may be formed of a first part according to a first format and a second part according to a second format (that is, the body BD is multi-parted), and the play-list information may be contained in one of the first and second parts.

[0146]

For example, as shown in Fig. 10, the body may include a first part BD1 according to SDP format and a second part BD2 according to text format, and the play-list information may be contained in the second part BD2.

[0147]

Further, although in the first embodiment described above, the play-list information is contained directly in the INVITE message, reference information may be contained in the INVITE message so that the play-list information can be referred to in the reference information. For example, as show in Fig. 11, reference information (substantially play-list information) PL representing the URI for referring to (acquiring) the play-list information may be contained in the INVITE message as the value of the type "u" in SDP in the body BD.

[0148]

The first embodiment described above is configured to simultaneously establish both of the connection for performing communication according to RTSP (RTSP connection) and the connection for performing communication according to RTP (RTP connection) by the execution of the processes of step A501 to step E501. In another modification of the first embodiment, the configuration may be such that the RTSP connection is established first by the execution of the processes of step A501 to step E501 and then the RTP connection is established by the execution of the same processes as those in step A501 to step E501.

[0149]

While in the first embodiment described above, the content delivery system 1 is designed to establish only one connection (RTP connection) for communication according to RTP in order to transmit main content data and advertisement content data, the content delivery system 1 may be designed to establish two RTP connections consisting of a RTP connection for transmitting main content data and a RTP connection for transmitting advertisement content data.

[0150]

While in the first embodiment described above, the service control functions part 40 is

designed to transmit play-list information to the media functions part 60, service control functions part 40 may be designed to transmit play-list information only to the user equipment 2 without transmitting the play-list information to the media functions part 60 (that is, without incorporating the play-list information in the content delivery instruction).

[0151]

<First Modification of the First Embodiment>

A content delivery system according to a first modification of the first embodiment of the present invention will be described. This content delivery system according to the first modification is different from the content delivery system according to the first embodiment in that the play-list information is contained in a message other than the connection establishment message. Therefore, the following description will be made focusing on the difference.

[0152]

Unlike the first embodiment, the service control functions part 40 according to the first modification does not generate play-list information upon receiving a content delivery request transmitted by the user equipment 2. The service control functions part 40 transmits a content delivery instruction containing no play-list information to the media functions part 60 via the core IMS part 30, as shown in Fig. 12 (step C1101).

[0153]

Upon receiving the content delivery instruction, the media functions part 60 transmits a delivery permission notification to the service control functions part 40 via the core IMS part 3 in the same manner as in step D501 according to the first embodiment (step D1101). The delivery permission notification is transmitted as an OK message of a SIP message.

[0154]

Upon receiving the delivery permission notification, the service control functions part 40 generates play-list information in the same manner as in step C501 according to the first embodiment (step C1102). Subsequently, the service control functions part 40 transmits a play-list notification containing the generated play-list information to the media functions part 60 via the core IMS part 30 (step C1103). The play-list notification is transmitted as an INFO message (message in which "INFO" is set as the method) of a SIP message. The play-list notification may be transmitted as a MESSAGE message (message in which "MESSAGE" is set as the method) in a SIP message.

[0155]

Thus, the media functions part 60 receives the play-list notification. The media functions part 60 then transmits a play-list reception completion notification to the service control functions part 40 via the core IMS part 30 (step D1102). The play-list reception completion notification is information containing play-list information and indicating that the play-list notification has been received. The play-list reception completion notification is transmitted as an OK message of a SIP message.

[0156]

Upon receiving the play-list reception completion notification, the service control functions part 40 transmits the play-list information to the user equipment 2 via the core IMS part 30 in the same manner as in step C503 according to the first embodiment. Further, the content delivery system establishes connection between the user equipment 2 and the media server 4b by executing the same processes as those in step C503 and onwards according to the first embodiment, and transmits content data from the media server 4b to the user equipment 2.

This first modification also provides the same advantages and effects as those of the first embodiment.

[0157]

<Second Modification of the First Embodiment>

A content delivery system according to a second modification of the first embodiment of the present invention will be described. This content delivery system according to the second modification differs from the content delivery system according to the first embodiment in that the play-list information is contained in a message other than the connection establishment message. Therefore, the following description will be made focusing on the difference.

[0158]

Unlike the first embodiment, the service control functions part 40 according to the second modification does not generate play-list information upon receiving a content delivery request transmitted by the user equipment 2. The service control functions part 40 transmits a content delivery instruction containing no play-list information to the media functions part 60 via the core IMS part 30, as shown in Fig. 13 (step C1201).

[0159]

Upon receiving the content delivery instruction, the media functions part 60 transmits a delivery permission notification to the service control functions part 40 via the core IMS part 30 in the same manner as in step D501 according to the first embodiment (step D1201). The

delivery permission notification is transmitted as an OK message of a SIP message.

[0160]

Further, the media functions part 60 transmits a play-list transmission request to the service control functions part 40 via the core IMS part 30 (step D1202). The play-list transmission request contains user identification information, equipment address information and main content identification information contained in the received content delivery instruction, and is information indicating a request for transmission of play-list information. The play-list transmission request is transmitted as an INFO message of a SIP message. The play-list transmission request may be transmitted as a MESSAGE message of a SIP message.

[0161]

Upon receiving the play-list transmission request, the service control functions part 40 generates play-list information in the same manner as in step C501 according to the first embodiment (step C1202). Subsequently, the service control functions part 40 transmits a play-list notification containing the generated play-list information to the media functions part 60 via the core IMS part 30 (step C1203). The play-list notification is transmitted as an OK message of a SIP message.

[0162]

Thus, the media functions part 60 receives the play-list notification. The media functions part 60 then transmits a play-list reception completion notification to the service control functions part 40 via the core IMS part 30 (step D1203). The play-list reception completion notification is information containing play-list information and indicating that the play-list notification has been received. The play-list reception completion notification is transmitted as an OK message of a SIP message.

[0163]

Upon receiving the play-list reception completion notification, the service control functions part 40 transmits the play-list information to the user equipment 2 via the core IMS part 30 in the same manner as in step C503 according to the first embodiment. Further, the content delivery system I establishes connection between the user equipment 2 and the media server 4b and transmits content data from the media server 4b to the user equipment 2 by executing the same processes as those in step C503 and onwards according to the first embodiment.

This second modification also provides the same advantages and effects as those of the

first embodiment.

[0164]

<Second Embodiment>

Next, a content delivery system according to a second embodiment of the present invention will be described. The content delivery system according to the second embodiment differs from the content delivery system according to the first embodiment in that while advertisement attribute information is transmitted to the media functions part 60 from the service control functions part 40, the media functions part 60 generates play-list information based on this advertisement attribute information. Therefore, the following description will be made focusing on the difference.

[0165]

As shown in Fig. 14, the service control functions part 40 according to the second embodiment does not include the advertisement attribute information storage 43, the advertisement insertion information storage 44, or the a play-list generator 45. The service control functions part 40 instead includes an advertisement selection information acquiring part 47.

[0166]

The advertisement selection information acquiring part 47 accepts a content delivery request as a process request received by the information transmitter-receiver 41. The advertisement selection information acquiring part 47 acquires, from the user basic information stored in the user basic information storage 51, user basic information stored in association with the user identification information contained in the content delivery request received by the information transmitter-receiver 41.

[0167]

Further, the advertisement selection information acquiring part 47 acquires, from the content basic information stored in the content basic information storage 42, content basic information stored in association with the main content identification information contained in the content delivery request.

[0168]

The delivery requesting part 46 outputs a content delivery instruction. The content delivery instruction contains advertisement selection information containing the user basic information and content basic information acquired by the advertisement selection information

acquiring part 47, and user authentication success information (i.e., user identification information), equipment address information and main content identification information contained in the content delivery request.

The information transmitter-receiver (delivery request reception means and advertisement selection information transmission means) 41 transmits the content delivery instruction output by the delivery requesting part 46 to the media server 4b via the core IMS part 30.

[0169]

The media functions part 60 includes an advertisement attribute information storage 66 similar to the advertisement attribute information storage 43, an advertisement insertion information storage 67 similar to the advertisement insertion information storage 44, and a play-list generator (advertisement content selection means) 68 similar to the play-list generator 45.

[0170]

The play-list generator 68 acquires advertisement selection information contained in the content delivery instruction received by the information transmitter-receiver (advertisement selection information reception means) 61. The a play-list generator 68 then calculates a final priority level for each item of the advertisement attribute information based on the acquired advertisement selection information. Subsequently, the play-list generator 68 extracts, from the advertisement content identification information stored in the advertisement attribute information storage 66, advertisement content identification information associated with the item of advertisement attribute information the calculated final priority level of which is the highest.

[0171]

On the other hand, the play-list generator 68 acquires, from the number-of-insertions information and insertion position information stored in the advertisement insertion information storage 67, number-of-insertions information and insertion position information stored in association with the main content identification information contained in the content delivery instruction.

[0172]

The play-list generator 68 selects, from the extracted advertisement content identification information, a number of items of advertisement content identification information, the number being that represented by the acquired number-of-insertions information.

Subsequently, the play-list generator 68 generates play-list information based on the selected advertisement content identification information, the main content identification information contained in the content delivery instruction, and the acquired insertion position information.

[0173]

The information transmitter-receiver then transmits the play-list information generated by the play-list generator 68 to the user equipment 2 via the service control functions part 40 and the core IMS part 30.

[0174]

Unlike the first embodiment, the service control functions part 40 according to the second embodiment does not generate play-list information upon receiving the content delivery request transmitted by the user equipment 2 (delivery request reception step). As shown in Fig. 15, the service control functions part 40 transmits a content delivery instruction containing advertisement selection information instead of the play-list information, to the media functions part 60 via the core IMS part 30 (step C1401, advertisement selection information transmission step).

[0175]

The content delivery instruction is transmitted as an INVITE message in a SIP message. As shown in Fig. 15, the INVITE message includes a header HD and a body BD. In this example, the user basic information UI in the advertisement selection information is contained as values of the field "X-user-favorite" in the header HD of the INVITE message. The content basic information CI in the advertisement selection information is contained as values of the field "X-content-favorite" in the header HD of the INVITE message.

[0176]

In this example, each of the user basic information UI and the content basic information CI includes portions of element information separated with commas. Each portion of the element information is separated into two parts with semicolons. The leading part of the two parts represents advertisement attribute information (e.g., "car" represents cars, and "real estate" represents real estate), while the end part represents priority information.

[0177]

This INVITE message is one of connection establishment messages which the core IMS part 30 exchanges with the user equipment 2, the service control functions part 40 and the media functions part 60 so that the core IMS part 30 establishes connection between the user equipment

2 and media functions part 60.

[0178]

It can be said that the service control functions part 40 transmits the advertisement selection information to the media functions part 60 (media server 4b) via the core IMS part 30 by incorporating the advertisement selection information in the connection establishment message.

[0179]

In other words, it can be said that the service control functions part 40 transmits play-list information containing advertisement selection information to the media server 4b via the core IMS part 30 when the core IMS part 30 executes a process for establishing connection between the user equipment 2 and the media functions part 60.

[0180]

The media functions part 60 receives the content delivery instruction transmitted by the service control functions part 40. Subsequently, the media functions part 60 acquires advertisement selection information contained in the received content delivery instruction.

[0181]

Subsequently, the media functions part 60 selects advertisement content identification information based on the acquired advertisement selection information, the advertisement content identification information stored in the advertisement attribute information storage 66, and the number-of-insertions information and insertion position information stored in the advertisement insertion information storage 67 (advertisement content selection step). Further, the media functions part 60 generates play-list information based on the selected advertisement content identification information, the main content identification information contained in the content delivery instruction, and the insertion position information stored in the advertisement insertion information storage 67 (step D1401).

[0182]

The media functions part 60 then transmits a delivery permission notification containing the generated play-list information to the service control functions part 40 via the core IMS part 30 in the same manner as in step D501 according to the first embodiment (step D501).

[0183]

Upon receiving the delivery permission notification, the service control functions part 40 transmits the play-list information to the user equipment 2 via the core IMS part 30 in the

same manner as in step C503 according to the first embodiment. Further, the content delivery system 1 establishes connection between the user equipment 2 and the media server 4b and transmits the content data to the user equipment 2 from the media server 4b by executing the same processes as those in steps C503 and onwards according to the first embodiment.

[0184]

In the second embodiment of the content delivery system according to the present invention, as described above, like the first embodiment, the content delivery system 1 transmits, to the user equipment 2, selected advertisement content specification information for specifying the advertisement content selected based on advertisement selection information. Therefore, it is possible to cause the user to view the viewing content in which the advertisement content selected according to the advertisement selection information is inserted.

[0185]

Further, according to the second embodiment described above, the application server system 4 is enabled to determine a sequence in which the main content and the advertisement content are output by the user equipment 2. This makes it possible to cause the user to view the advertisement content in such a manner that the intent of an advertiser who provides the advertisement content is reflected more clearly.

[0186]

Further, in the second embodiment, the advertisement selection information contains user basic information associated with user identification information. This enables the content delivery system 1 to cause a user of the user equipment 2 which has transmitted a content delivery request to view viewing content in which advertisement content selected according to the user is inserted.

[0187]

In addition, in the second embodiment, the advertisement selection information contains content basic information associated with main content identification information. This enables the content delivery system 1 to cause the user to view viewing content in which advertisement content selected according to main content identified by the main content identification information contained in the content delivery request is inserted.

[0188]

Further, in the second embodiment, the service control functions part 40 is configured to transmit advertisement selection information to the media server 4b via the connection control

system 3 when the connection control system 3 executes a process for establishing connection. This enables the service control server 4a to transmit to the media server 4b the latest advertisement selection information at the time when the connection control system 3 executes the process for establishing connection. As a result, the media server 4b is able to select advertisement content data based on this updated advertisement selection information.

[0189]

In addition, in the second embodiment, the service control functions part 40 is configured to transmit the advertisement selection information to the media server 4b via the connection control system 3 by incorporating the advertisement selection information in a connection establishment message.

[0190]

This releases the service control server 4a from the need to transmit other messages than the connection establishment message in order to transmit the advertisement selection information to the media server 4b. This means that the number of communications performed among the connection control system 3, the service control server 4a and the media server 4b can be reduced. In other words, the processing load and/or the communication load required for the connection control system 3, the service control server 4a and the media server 4b to exchange messages can be reduced.

[0191]

<Third Embodiment>

Next, a content delivery system according to a third embodiment of the present invention will be described. The content delivery system according to the third embodiment differs from the content delivery system according to the first embodiment in that while selected advertisement content specification information is transmitted from the service control functions part 40 to the media functions part 60, the media functions part 60 generates play-list information based on the selected advertisement content specification information. Therefore, the following description will be made focusing on the difference.

[0192]

The service control functions part 40 according to the third embodiment as shown in Fig. 16 does not include the advertisement insertion information storage 44 or the play-list generator 45. The service control functions part 40 includes an advertisement content selector (advertisement content selection means) 48.

[0193]

The content basic information storage 42 according to the third embodiment stores content basic information and number-of-insertions information in association with main content identification information for identifying main content.

[0194]

The advertisement content selector 48 accepts a content delivery request as a process request received by the information transmitter-receiver 41. The advertisement content selector 48 acquires, from the user basic information stored in the user basic information storage 51, user basic information stored in association with the user identification information contained in the content delivery request received by the information transmitter-receiver 41.

[0195]

Further, the advertisement content selector 48 acquires, from the content basic information stored in the content basic information storage 42, content basic information stored in association with the main content identification information contained in the content delivery request.

[0196]

The advertisement content selector 48 then calculates a final priority level for each item of the advertisement attribute information, based on the acquired user basic information and the acquired content basic information. Subsequently, the advertisement content selector 48 extracts, from the advertisement content identification information stored in the advertisement attribute information storage 43, advertisement content identification information associated with the item of advertisement attribute information the calculated final priority level of which is the highest.

[0197]

On the other hand, the advertisement content selector 48 acquires, from the number-of-insertions information stored in the content basic information storage 42, number-of-insertions information stored in association with the main content identification information contained in the content delivery request. The advertisement content selector 48 then selects, from the extracted advertisement content identification information, a number of items of advertisement content identification information, the number being that represented by the acquired number-of-insertions information.

[0198]

The delivery requesting part 46 outputs a content delivery instruction. The content delivery instruction includes selected advertisement content specification information containing the advertisement content identification information selected by the advertisement content selector 48, and user authentication success information (i.e., user identification information), equipment address information and main content identification information contained in the content delivery request.

The information transmitter-receiver (delivery request reception means and selected advertisement content specification information transmission means) 41 transmits the content delivery instruction output by the delivery requesting part 46 to the media server 4b via the core IMS part 30.

[0199]

The media functions part 60 includes an advertisement insertion information storage 67 similar to the advertisement insertion information storage 44, and a play-list generator 68 similar to the play-list generator 45.

[0200]

The play-list generator 68 acquires selected advertisement content specification information contained in the content delivery instruction received by the information transmitter-receiver 61.

On the other hand, the play-list generator 68 acquires, from the insertion position information stored in the advertisement insertion information storage 67, insertion position information stored in association with the main content identification information contained in the content delivery instruction.

[0201]

The play-list generator 68 then generates play-list information based on the advertisement content identification information contained in the acquired selected advertisement content specification information, the main content identification information contained in the content delivery instruction, and the acquired insertion position information.

[0202]

The information transmitter-receiver 61 then transmits the play-list information generated by the play-list generator 68 to the user equipment 2 via the service control functions part 40 and the core IMS part 30.

[0203]

Unlike the first embodiment, the service control functions part 40 according to the third embodiment does not generate play-list information upon receiving the content delivery request transmitted by the user equipment 2 (delivery request reception step). As shown in Fig. 18, the service control functions part 40 transmits a content delivery instruction containing selected advertisement content specification information instead of play-list information to the media functions part 60 via the core IMS part 30 (step C1701).

[0204]

The content delivery instruction is transmitted as an INVITE message of a SIP message. As shown in Fig. 19, the INVITE message includes a header HD and a body BD. In this example, selected advertisement content specification information AD is contained as values of the field "X-video-advertisement" in the header HD of the INVITE message. In this example, the selected advertisement content specification information AD includes advertisement content identification information separated with commas.

[0205]

This INVITE message is one of connection establishment messages which the core IMS part 30 exchanges with the user equipment 2, the service control functions part 40 and the media functions part 60 so that the core IMS part 30 establishes connection between the user equipment 2 and the media functions part 60.

[0206]

It can be said that the service control functions part 40 transmits selected advertisement content specification information to the media functions part 60 (media server 4b) via the core IMS part 30 by incorporating the selected advertisement content specification information in the connection establishment message.

[0207]

In other words, it can be said that the service control functions part 40 transmits play-list information containing the selected advertisement content specification information to the media server 4b via the core IMS part 30 when the core IMS part 30 executes a process for establishing connection between the user equipment 2 and the media functions part 60.

[0208]

Upon receiving the content delivery instruction, the media functions part 60 acquires selected advertisement content specification information contained in the received content delivery instruction. Subsequently, the media functions part 60 generates play-list information

based on advertisement content identification information contained in the acquired selected advertisement content specification information, insertion position information stored in the advertisement insertion information storage 67, and main content identification information contained in the content delivery instruction (step D1701).

[0209]

Subsequently, the media functions part 60 transmits a delivery permission notification containing the generated play-list information to the service control functions part 40 via the core IMS part 30 in the same manner as in step D501 according to the first embodiment (step D501).

[0210]

Upon receiving the delivery permission notification, the service control functions part 40 transmits the play-list information to the user equipment 2 via the core IMS part 30 in the same manner as in step C503 according to the first embodiment (selected advertisement content specification information transmission step). Further, the content delivery system 1 establishes connection between the user equipment 2 and the media server 4b and transmits content data to the user equipment 2 from the media server 4b by executing the same processes as those in step C503 and onwards according to the first embodiment.

[0211]

This third embodiment is also capable of providing the same advantages and effects as those of the second embodiment.

[0212]

<Fourth Embodiment>

Next, a content delivery system according to a fourth embodiment of the present invention will be described with reference to Fig. 20.

The content delivery system 1 according to the fourth embodiment includes an application server system and a connection control system. The connection control system is configured to receive equipment specification information transmitted by user equipment and to establish connection between the application server system and the user equipment based on the received equipment specification information.

[0213]

The content delivery system 1 further includes a content storage (content storage means) RC, delivery request receiver (delivery request reception means) 101, an advertisement content selector (advertisement content selection means) 102, and a selected advertisement content

specification information transmitter (selected advertisement content specification information transmission means) 103.

[0214]

The content storage RC stores advertisement content data representing advertisement content and main content data representing main content.

The delivery request receiver 101 receives, via the connection control system 3, a content delivery request containing main content identification information for identifying main content and transmitted by the user equipment 2.

[0215]

The advertisement content selector 102 selects the advertisement content data stored in the content storage RC based on advertisement selection information containing advertisement attribute information representing an attribute of the advertisement content.

The selected advertisement content specification information transmitter 103 transmits selected advertisement content specification information for specifying advertisement content data selected by the advertisement content selector 102 via the connection control system 3 to the user equipment 2 which has transmitted the content delivery request.

[0216]

According to this configuration, the content delivery system 1 transmits to the user equipment 2 the selected advertisement content specification information for specifying the advertisement content selected based on the advertisement selection information. In this manner, it is made possible to cause a user of the user equipment 2 to view viewing content in which main content (desired viewing content) and/or advertisement content selected according to the user is inserted, for example, by configuring the user equipment 2 to output viewing content in which advertisement content specified by the selected advertisement content specification information is inserted, and configuring the application server system 4 to select the main content and/or the advertisement content according to the user.

[0217]

In this case, it is preferable that: the user equipment comprises: selected advertisement content specification information reception means for receiving the selected advertisement content specification information transmitted by the application server system; and content viewing request transmission means for transmitting, to the application server system, a main content viewing request containing the main content identification information and an

advertisement content viewing request containing the received selected advertisement content specification information when connection with the application server system is established by the connection control system, and the application server system comprises content delivering means for receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by the main content identification information contained in the received main content viewing request to the user equipment, and for receiving the advertisement content viewing request transmitted by the user equipment and transmitting advertisement content data specified by the selected advertisement content specification information contained in the received advertisement content viewing request to the user equipment.

[0218]

In this case, it is preferable that the user equipment comprises content outputting means for receiving main content data and advertisement content data transmitted by the application server system and outputting, based on the received main content data and advertisement content data, viewing content in which advertisement content represented by the advertisement content data is inserted in main content represented by the main content data.

[0219]

This makes it possible to cause the user to view viewing content in which main content (desired viewing content) and/or advertisement content according to the user are/is inserted, for example, by configuring the application server system to select main content and/or advertisement content according to the user.

[0220]

In this case, it is preferable that: the selected advertisement content specification information transmission means is configured to transmit via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected advertisement content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the advertisement content specified by the selected advertisement content specification information are output; the selected advertisement content specification information reception means is configured to receive the play-list information transmitted by the application server system; and the content viewing request

transmission means is configured to transmit the main content viewing request and the advertisement content viewing request to the application server system, based on the received play-list information.

[0221]

This enables the application server system to determine a sequence in which main content and advertisement content are output by the user equipment. Accordingly, it is made possible to cause the user to view advertisement content in which the intent of an advertiser who provides the advertisement content is reflected more clearly.

[0222]

In this case, the content storage means is configured to store the advertisement content data in association with the advertisement attribute information representing an attribute of the advertisement content represented by the advertisement content data; the advertisement selection information contains content basic information that is information for specifying the advertisement attribute information and is information associated with the main content identification information for identifying the main content; and the advertisement content selection means is configured to select advertisement content data stored in association with the advertisement attribute information specified by the content basic information associated with the main content identification information contained in the received content delivery request.

[0223]

This enables the content delivery system to cause a user of the user equipment which has transmitted the content delivery request to view viewing content in which advertisement content selected according to the user is inserted.

[0224]

In this case, it is preferable that the content storage means is configured to store the advertisement content data in association with the advertisement attribute information representing an attribute of the advertisement content represented by the advertisement content data; the advertisement selection information contains content basic information that is information for specifying the advertisement attribute information and is information associated with the main content identification information for identifying the main content; and the advertisement content selection means is configured to select advertisement content data stored in association with the advertisement attribute information specified by the content basic information associated with the main content identification information contained in the received

content delivery request.

[0225]

This enables the content delivery system to cause the user to view viewing content in which advertisement content selected according to the main content identified by the main content identification information contained in the received content delivery request is inserted.

[0226]

In this case, it is preferable that the selected advertisement content specification information transmission means is configured to transmit the selected advertisement content specification information to the user equipment via the connection control system when the connection control system executes a process for establishing the connection.

[0227]

When the application server system is configured to transmit the selected advertisement content specification information to the user equipment before the connection control system executes a process for establishing connection, and if the advertisement selection information is altered after transmission of the selected advertisement content specification information, this altered advertisement selection information cannot be reflected in the selected advertisement content specification information received by the user equipment.

[0228]

According to the configuration of the invention above, however, the application server system is capable of transmitting to the user equipment the selected advertisement content specification information in which the latest advertisement selection information at the time when the connection control system executes a process for establishing connection is reflected.

[0229]

In this case, it is preferable that: the connection control system is configured to establish the connection by exchanging a predetermined connection establishment message with the user equipment and the application server system; and the selected advertisement content specification information transmission means is configured to transmit the selected advertisement content specification information to the user equipment via the connection control system by incorporating the selected advertisement content specification information in the connection establishment message.

[0230]

This eliminates the need of the application server system to transmit any other message

than the connection establishment message in order to transmit the selected advertisement content specification information to the user equipment. This means that the number of communications performed among the connection control system, the service control server, and the user equipment can be reduced. In other words, the processing load and/or communication load required for the connection control system, the application server system and the user equipment to exchange messages can be reduced.

[0231]

In this case, it is preferable that: the application server system comprises a service control server and a media server; the service control server comprises the delivery request reception means, the advertisement content selection means, and the selected advertisement content specification information transmission means; and the media server comprises the content storage means.

[0232]

In another embodiment of the content delivery system, it is preferable that: the application server system comprises a service control server and a media server; the service control server comprises the delivery request reception means; the media server comprises the content storage means, the advertisement content selection means, and the selected advertisement content specification information transmission means; the service control server further comprises advertisement selection information transmission means for transmitting the advertisement selection information to the media server via the connection control system; the media server further comprises advertisement selection information reception means for receiving the advertisement selection information transmitted by the service control server; and the advertisement content selection means is configured to select the advertisement content data based on the received advertisement selection information.

[0233]

Another aspect of the present invention provides a content delivery system including an application server system and a connection control system. The connection control system includes a core IMS (Internet Protocol Multimedia Subsystem) part for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user equipment based on the received equipment specification information, and the application server system includes: a media functions part for transmitting content data representing content to the user equipment with which connection is established by

the core IMS part; a service control functions part for controlling a service provided by the media functions part; and a user profile server functions part for storing profile information of a user of the user equipment. The media functions part includes content storage means for storing advertisement content data representing advertisement content and main content data representing main content, and the service control functions part includes: delivery request reception means for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment; advertisement content selection means for selecting the stored advertisement content data based on advertisement selection information containing advertisement attribute information representing an attribute of the advertisement content and preliminarily stored by the user profile server functions part, the service control functions part or the connection control system; and selected advertisement content specification information transmission means for transmitting selected advertisement content specification information for specifying the selected advertisement content data , via the core IMS part to the user equipment which has transmitted the content delivery request.

[0234]

In this case, it is preferable that the user equipment includes: selected advertisement content specification information reception means for receiving the selected advertisement content specification information transmitted by the service control functions part; and content viewing request transmission means for transmitting, to the media functions part, a main content viewing request containing the main content identification information and an advertisement content viewing request containing the selected advertisement content specification information, when connection with the media functions part is established by the core IMS part, and the media functions part comprises content delivering means for receiving the main content viewing request transmitted by the user equipment and transmitting to the user equipment main content data identified by the main content identification information contained in the received main content viewing request, and for receiving the advertisement content viewing request transmitted by the user equipment and transmitting to the user equipment advertisement content data specified by the selected advertisement content specification information contained in the received advertisement content viewing request.

[0235]

In this case, it is preferable that the user equipment includes content outputting means

for receiving main content data and advertisement content data transmitted by the media functions part, and outputting, based on the received main content data and advertisement content data, viewing content in which advertisement content represented by the advertisement content data is inserted in main content represented by the main content data.

[0236]

In this case, it is preferable that the selected advertisement content specification information transmission means is configured to transmit, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected advertisement content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the advertisement content specified by the selected advertisement content specification information are output; the selected advertisement content specification information reception means is configured to receive the play-list information transmitted by the service control functions part; and the content viewing request transmission means is configured to transmit the main content viewing request and the advertisement content viewing request to the media functions part, based on the received play-list information.

[0237]

Another aspect of the present invention relates to a content delivery method comprising: receiving equipment specification information transmitted by user equipment and establishing connection between an application server system and the user equipment based on the received equipment specification information, by a connection control system; receiving, via the connection control system, a content delivery request containing main content identification information for identifying main content and transmitted by the user equipment, by the application server system; selecting advertisement content data stored in a storing device for storing advertisement content data representing advertisement content and main content data representing main content, based on advertisement selection information containing advertisement attribute information representing an attribute of advertisement content; and transmitting selected advertisement content specification information specifying the selected advertisement content data via the connection control system to the user equipment which has transmitted the content delivery request, by the application server system.

[0238]

In this case, the content delivery method preferably includes: receiving the selected advertisement content specification information transmitted by the application server system, by the user equipment; transmitting, to the application server system, a main content viewing request containing the main content identification information and an advertisement content viewing request containing the received selected advertisement content specification information, by the user equipment, when connection between the user equipment and the application server system is established by the connection control system; and receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by main content identification information contained in the received main content viewing request to the user equipment, and receiving the advertisement content viewing request transmitted by the user equipment and transmitting advertisement content data specified by selected advertisement content specification information contained in the received advertisement content viewing request to the user equipment, by the application server system.

[0239]

In this case, the content delivery method preferably includes receiving the main content data and the advertisement content data transmitted by the application server system, and outputting, based on the received main content data and advertisement content data, viewing content in which advertisement content represented by the advertisement content data is inserted in main content represented by the main content data, by the user equipment.

[0240]

In this case, the content delivery method preferably includes: transmitting, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected advertisement content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the advertisement content specified by the selected advertisement content specification information are output, by the application server system; receiving the play-list information transmitted by the application server system, by the user equipment; and transmitting the main content viewing request and the advertisement content viewing request to the application server system based on the received play-list information, by the user equipment.

[0241]

Another aspect of the present invention relates to a computer program comprising instructions for causing a service control server to realize: delivery request reception means for receiving a content delivery request containing main content identification information for identifying main content and transmitted by user equipment, via a connection control system establishing connection between a media server and the user equipment; advertisement content selection means for selecting advertisement content data preliminarily stored in a storing device based on advertisement selection information containing advertisement attribute information representing an attribute of advertisement content; and selected advertisement content specification information transmission means for transmitting selected advertisement content specification information specifying the selected advertisement content data, via the connection control system to the user equipment which has transmitted the content delivery request.

[0242]

In this case, the selected advertisement content specification information transmission means is preferably configured to transmit, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected advertisement content specification information, and is information containing information indicating a sequence in which main content identified by the main content identification information and advertisement content specified by the selected advertisement content specification information are output.

[0243]

Still another aspect of the present invention relates to a computer program further comprising instructions for causing user equipment to realize: selected advertisement content specification information reception means for receiving selected advertisement content specification information which is information for specifying selected advertisement content data and transmitted by an application server system, via a connection control system establishing connection between the application server system and the user equipment; and content viewing request transmission means for transmitting, to the application server system, a main content viewing request containing main content identification information for identifying main content and an advertisement content viewing request containing the received selected advertisement content specification information, when connection with the application server system is

established by the connection control system.

[0244]

In this case, the computer program preferably further comprises instructions for causing the user equipment to realize content outputting means for receiving the main content data and the advertisement content data transmitted by the application server system, and outputting, based on the received main content data and advertisement content data, viewing content in which advertisement content represented by the advertisement content data is inserted in main content represented by the main content data.

[0245]

In this case, it is preferable that the selected advertisement content specification information reception means is configured to receive play-list information which is information containing the main content identification information and the selected advertisement content specification information, and containing information indicating a sequence in which main content identified by the main content identification information and advertisement content specified by the selected advertisement content specification information are output, and is information transmitted by the application server system; and the content viewing request transmission means is configured to transmit the main content viewing request and the advertisement content viewing request to the application server system, based on the received play-list information.

[0246]

The invention of the content delivery method or program having the configuration as described above is also capable of achieving the object of the present invention since it has the same advantageous effects as those of the content delivery system described above.

[0247]

Although the present invention has been described in conjunction with the exemplary embodiments above, the invention is not limited to these embodiments. ***Configuration and particulars of*** the present invention may be altered variously as conceivable by those skilled in the art without departing from the scope of the claims of the present invention. For example, an arbitrary combination of the embodiments and modification examples described above may be employed as a modification of the embodiments.

[0248]

Although in the embodiments described above, the advertisement selection information

contains both of user basic information and content basic information, it may contain only one of the user basic information and the content basic information.

[0249]

Although in the embodiments described above, the user profile server functions part 50 is configured to include the user basic information storage 51, the service control functions part 40 instead of the user profile server functions part 50 may be configured to include the user basic information storage 51. In other words, the service control functions part 40 may store the user basic information in association with the user identification information.

[0250]

Although in the embodiments described above, the advertisement selection information contains the user basic information and the content basic information, the advertisement selection information may contain user equipment position information representing the position of the user equipment 2, date-and-time-of-transmission information representing the date and time (day of the week may also be included) when the content delivery request is transmitted, and/or user attribute information representing an attribute of the user who has transmitted the content delivery request (e.g., the user's place of residence, age, gender, height, weight and/or occupation), in place of the user basic information and/or the content basic information, or in addition to the user basic information and the content basic information. In this case, the content delivery system 1 may be configured to transmit the user equipment position information stored in the core IMS part 30 to the media functions part 60.

[0251]

Although in the embodiments described above, the content element information contained in the play-list information is composed of a combination of content identification information, and reproduction start position and reproduction end position of content identified by the content identification information, the play-list information may be composed only of the content identification information. In this case, the content data stored in the content data storage 62 is preferably data representing respective portions of the content generated by dividing a single item of main content at positions where advertisement content is inserted.

[0252]

Although in the embodiments described above, the final priority level is calculated by combining a priority level represented by priority information contained in the user basic information and a priority level represented by priority information contained in the content

basic information. Alternatively, the final priority level may be calculated by combining a value obtained by multiplying the priority level represented by the priority information contained in the user basic information by a first factor and a value obtained by multiplying the priority level represented by the priority information contained in the content basic information by a second factor.

[0253]

Although in the embodiments above, the advertisement attribute information associated with the advertisement content to be selected is composed only of a single item of advertisement attribute information (the calculated final priority level of which is the highest), the advertisement attribute information may be composed of a plurality of items of advertisement attribute information. In this case, each of the embodiments described above is preferably configured such that an item of advertisement attribute information associated with advertisement content the calculated final priority level of which is higher is selected with a higher priority.

[0254]

In a modification of the embodiments above, a server may be provided having functions of both of the service control server 4a and the media server 4b, in place of the service control server 4a and the media server 4b.

Further, in a modification of the embodiments above, a server may be provided having functions of both of the service control server 4a and the user information management server 4c, in place of the service control server 4a and the user information management server 4c.

[0255]

Although the media server 4b has the entire media functions part 60 in the embodiments described above, configuration may be such that a first server has part of the media functions part 60 (media control functions part) and a second server has the remaining part of the media functions part 60 (media delivery functions part).

In a modification of the embodiments above, a plurality of servers having the media delivery functions of the media functions part 60 may be provided.

[0256]

Although the connection control system 3 includes a plurality of connection control servers (connection control servers 3a, 3b and so on) in the modifications of the embodiments above, the connection control system 3 may include a single connection control server.

[0257]

Although in the embodiments above, the content delivery system 1 is configured to transmit the play-list information or the advertisement attribute information according to SIP, it may be configured to transmit according to another communication protocol (such as RTSP).

[0258]

Although the user equipment 2 is a set-top box in the embodiments above, the user equipment 2 may be a cell-phone, a PDA (Personal Data Assistance), a Smartphone, a PHS (Personal Handyphone System), a game machine, car navigation equipment, a personal computer, or the like.

Further, although the content is video in the embodiments above, the content may be images only or audio only.

[0259]

Although in the embodiments above the components of the content delivery system 1 is described as those forming the IMS (IP Multimedia Subsystem), they may be described as components forming a MMS (Multimedia Messaging Service).

[0260]

Although in the embodiments above, the computer program is stored in the storing device, the computer program may be stored in a computer-readable recording medium. For example, the recording medium may be a medium with portability, such as a flexible disk, optical disk, a magneto-optical disk, and a semiconductor memory.

[0261]

Although in the embodiments above the functions of the content delivery system 1 are realized by the CPU executing the computer program (software), they may be realized by hardware such a circuit or the like.

[0262]

The present invention is based upon and claims the benefit of priority from Japanese patent application No. 2008-294270 filed November 18, 2008, the disclosure of which is incorporated herein in its entirety by reference.

INDUSTRIAL APPLICABILITY

[0263]

The present invention is applicable to video-on-demand systems for content delivery via

IP networks, and IPTV systems for TV broadcasting via IP networks.

CLAIMS

1. A content delivery system comprising an application server system and a connection control system,

the connection control system being configured to receive equipment specification information transmitted by user equipment and establish connection between the application server system and this user equipment based on the received equipment specification information,

the application server system comprising:

content storage means for storing advertisement content data representing advertisement content and main content data representing main content;

delivery request reception means for receiving, via the connection control system, a content delivery request transmitted by the user equipment and containing main content identification information for identifying the main content;

advertisement content selection means for selecting the stored advertisement content data based on advertisement selection information containing advertisement attribute information representing an attribute of the advertisement content; and

selected advertisement content specification information transmission means for transmitting selected advertisement content specification information for specifying the selected advertisement content data via the connection control system to the user equipment which has transmitted the content delivery request.

2. The content delivery system according to claim 1, wherein:

the user equipment comprises:

selected advertisement content specification information reception means for receiving the selected advertisement content specification information transmitted by the application server system; and

content viewing request transmission means for transmitting, to the application server system, a main content viewing request containing the main content identification information and an advertisement content viewing request containing the received selected advertisement content specification information when connection with the application server system is established by the connection control system, and

the application server system comprises content delivering means for receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by the main content identification information contained in the received main content viewing request to the user equipment, and for receiving the advertisement content viewing request transmitted by the user equipment and transmitting advertisement content data specified by the selected advertisement content specification information contained in the received advertisement content viewing request to the user equipment.

3. The content delivery system according to claim 1 or 2, wherein the user equipment comprises content outputting means for receiving main content data and advertisement content data transmitted by the application server system and outputting, based on the received main content data and advertisement content data, viewing content in which advertisement content represented by the advertisement content data is inserted in main content represented by the main content data.

4. The content delivery system according to any of claims 1 to 3, wherein:

the selected advertisement content specification information transmission means is configured to transmit via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected advertisement content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the advertisement content specified by the selected advertisement content specification information are output;

the selected advertisement content specification information reception means is configured to receive the play-list information transmitted by the application server system; and

the content viewing request transmission means is configured to transmit the main content viewing request and the advertisement content viewing request to the application server system, based on the received play-list information.

5. The content delivery system according to any of claims 1 to 4, wherein:

the content storage means is configured to store the advertisement content data in

association with advertisement attribute information representing an attribute of advertisement content represented by the advertisement content data;

the advertisement selection information contains user basic information that is information for specifying the advertisement attribute information and is information associated with user identification information for identifying a user of the user equipment; and

the advertisement content selection means is configured to select advertisement content data stored in association with the advertisement attribute information specified by the user basic information associated with the user identification information for identifying the user of the user equipment which has transmitted the content delivery request.

6. The content delivery system according to any of claims 1 to 5, wherein:

the content storage means is configured to store the advertisement content data in association with advertisement attribute information representing an attribute of the advertisement content represented by the advertisement content data;

the advertisement selection information contains content basic information that is information for specifying the advertisement attribute information and is information associated with the main content identification information for identifying the main content; and

the advertisement content selection means is configured to select advertisement content data stored in association with the advertisement attribute information specified by the content basic information associated with the main content identification information contained in the received content delivery request.

7. The content delivery system according to any of claims 1 to 6, wherein the selected advertisement content specification information transmission means is configured to transmit the selected advertisement content specification information to the user equipment via the connection control system when the connection control system executes a process for establishing the connection.

8. The content delivery system according to claim 7, wherein

the connection control system is configured to establish the connection by exchanging a predetermined connection establishment message with each of the user equipment and the application server system; and

the selected advertisement content specification information transmission means is configured to transmit the selected advertisement content specification information to the user equipment via the connection control system by incorporating the selected advertisement content specification information in the connection establishment message.

9. The content delivery system according to any of claims 1 to 8, wherein:

the application server system comprises a service control server and a media server;

the service control server comprises the delivery request reception means, the advertisement content selection means, and the selected advertisement content specification information transmission means; and

the media server comprises the content storage means.

10. The content delivery system according to any of claims 1 to 8, wherein:

the application server system comprises a service control server and a media server;

the service control server comprises the delivery request reception means;

the media server comprises the content storage means, the advertisement content selection means, and the selected advertisement content specification information transmission means;

the service control server further comprises advertisement selection information transmission means for transmitting the advertisement selection information to the media server via the connection control system;

the media server further comprises advertisement selection information reception means for receiving the advertisement selection information transmitted by the service control server; and

the advertisement content selection means is configured to select the advertisement content data based on the received advertisement selection information.

11. A content delivery system comprising an application server system and a connection control system,

the connection control system comprising a core IMS (Internet Protocol Multimedia Subsystem) part for receiving equipment specification information transmitted by user equipment and establishing connection between the application server system and the user

equipment based on the received equipment specification information,

the application server system comprising:

a media functions part for transmitting content data representing content to the user equipment with which the connection is established by the core IMS part;

a service control functions part for controlling a service provided by the media functions part; and

a user profile server functions part for storing profile information of a user of the user equipment,

the media functions part comprising content storage means for storing advertisement content data representing advertisement content and main content data representing main content,

the service control functions part comprising:

delivery request reception means for receiving a content delivery request containing main content identification information for identifying the main content and transmitted by the user equipment, via the core IMS part; and

advertisement content selection means for selecting the stored advertisement content data based on advertisement selection information containing advertisement attribute information representing an attribute of the advertisement content and preliminarily stored by the user profile server functions part, the service control functions part or the connection control system; and

selected advertisement content specification information transmission means for transmitting selected advertisement content specification information for specifying the selected advertisement content data , via the core IMS part to the user equipment which has transmitted the content delivery request.

12. The content delivery system according to claim 11, wherein:

the user equipment comprises:

selected advertisement content specification information reception means for receiving the selected advertisement content specification information transmitted by the service control functions part; and

content viewing request transmission means for transmitting, to the media functions part, a main content viewing request containing the main content identification

information and an advertisement content viewing request containing the received selected advertisement content specification information, when connection with the media functions part is established by the core IMS part, and

the media functions part comprises content delivering means for receiving the main content viewing request transmitted by the user equipment and transmitting to the user equipment main content data identified by the main content identification information contained in the received main content viewing request, and for receiving the advertisement content viewing request transmitted by the user equipment and transmitting to the user equipment advertisement content data specified by the selected advertisement content specification information contained in the received advertisement content viewing request.

13. The content delivery system according to claim 11 or 12, wherein the user equipment comprises content outputting means for receiving main content data and advertisement content data transmitted by the media functions part, and outputting, based on the received main content data and advertisement content data, viewing content in which advertisement content represented by the advertisement content data is inserted in main content represented by the main content data.

14. The content delivery system according to any of claims 11 to 13, wherein

the selected advertisement content specification information transmission means is configured to transmit, via the core IMS part to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected advertisement content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the advertisement content specified by the selected advertisement content specification information are output;

the selected advertisement content specification information reception means is configured to receive the play-list information transmitted by the service control functions part; and

the content viewing request transmission means is configured to transmit the main content viewing request and the advertisement content viewing request to the media functions

part, based on the received play-list information.

15. A content delivery method comprising:

receiving equipment specification information transmitted by user equipment and establishing connection between an application server system and the user equipment based on the received equipment specification information, by a connection control system;

receiving, via the connection control system, a content delivery request containing main content identification information for identifying main content and transmitted by the user equipment, by the application server system;

selecting advertisement content data stored in a storing device for storing advertisement content data representing advertisement content and main content data representing main content, based on advertisement selection information containing advertisement attribute information representing an attribute of advertisement content; and

transmitting selected advertisement content specification information specifying the selected advertisement content data via the connection control system to the user equipment which has transmitted the content delivery request, by the application server system.

16. The content delivery method according to claim 15, comprising:

receiving the selected advertisement content specification information transmitted by the application server system, by the user equipment;

transmitting, to the application server system, a main content viewing request containing the main content identification information and an advertisement content viewing request containing the received selected advertisement content specification information, by the user equipment, when connection between the user equipment and the application server system is established by the connection control system; and

receiving the main content viewing request transmitted by the user equipment and transmitting main content data identified by main content identification information contained in the received main content viewing request to the user equipment, and receiving the advertisement content viewing request transmitted by the user equipment and transmitting advertisement content data specified by selected advertisement content specification information contained in the received advertisement content viewing request to the user equipment, by the application server system.

17. The content delivery method according to claim 15 or 16, comprising:

receiving the main content data and the advertisement content data transmitted by the application server system, and outputting, based on the received main content data and advertisement content data, viewing content in which advertisement content represented by the advertisement content data is inserted in main content represented by the main content data, by the user equipment.

18. The content delivery method according to any of claims 15 to 17, comprising:

transmitting, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information that is information containing the main content identification information contained in the content delivery request and the selected advertisement content specification information, and is information containing information indicating a sequence in which the main content identified by the main content identification information and the advertisement content specified by the selected advertisement content specification information are output, by the application server system;

receiving the play-list information transmitted by the application server system, by the user equipment; and

transmitting the main content viewing request and the advertisement content viewing request to the application server system based on the received play-list information, by the user equipment.

19. A computer program comprising instructions for causing a service control server to realize:

delivery request reception means for receiving a content delivery request containing main content identification information for identifying main content and transmitted by user equipment, via a connection control system establishing connection between a media server and the user equipment;

advertisement content selection means for selecting advertisement content data preliminarily stored in a storing device based on advertisement selection information containing advertisement attribute information representing an attribute of advertisement content; and

selected advertisement content specification information transmission means for

transmitting selected advertisement content specification information specifying the selected advertisement content data, via the connection control system to the user equipment which has transmitted the content delivery request.

20. The computer program according to claim 19, wherein the selected advertisement content specification information transmission means is configured to transmit, via the connection control system to the user equipment which has transmitted the content delivery request, play-list information which is information containing the main content identification information contained in the content delivery request and the selected advertisement content specification information, and is information containing information indicating a sequence in which main content identified by the main content identification information and advertisement content specified by the selected advertisement content specification information are output.

21. A computer program comprising instructions for causing user equipment to realize:

selected advertisement content specification information reception means for receiving selected advertisement content specification information which is information for specifying selected advertisement content data and transmitted by an application server system, via a connection control system establishing connection between the application server system and the user equipment; and

content viewing request transmission means for transmitting, to the application server system, a main content viewing request containing main content identification information for identifying main content and an advertisement content viewing request containing the received selected advertisement content specification information, when connection with the application server system is established by the connection control system.

22. The computer program according to claim 21, further comprising instructions for causing the user equipment to realize:

content outputting means for receiving main content data and advertisement content data transmitted by the application server system, and outputting, based on the received main content data and advertisement content data, viewing content in which advertisement content represented by the advertisement content data is inserted in main content represented by the main content data.

23. The computer program according to claim 21 or 22, wherein:

the selected advertisement content specification information reception means is configured to receive play-list information which is information containing the main content identification information and the selected advertisement content specification information, and containing information indicating a sequence in which main content identified by the main content identification information and advertisement content specified by the selected advertisement content specification information are output, and is information transmitted by the application server system; and

the content viewing request transmission means is configured to transmit the main content viewing request and the advertisement content viewing request to the application server system, based on the received play-list information.

ABSTRACT

The system (1) includes an application server system (AP system) (4) and a connection control system (3). Based on equipment specification information transmitted by user equipment (2), the connection control system (3) establishes connection between the AP system (4) and the user equipment (2). The AP system (4) receives a content delivery request transmitted by the user equipment (2) and containing information for identifying main content. The AP system (4) selects advertisement content based on advertisement selection information. The AP system (4) transmits information for specifying the selected advertisement content to the user equipment (2).

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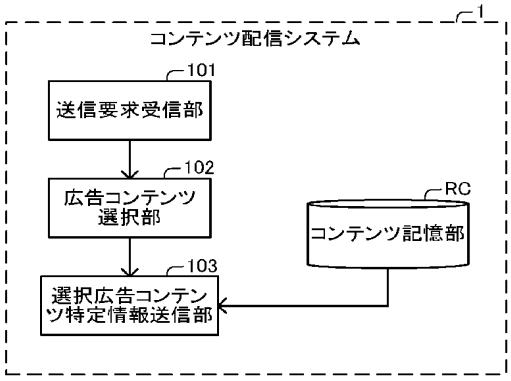
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[続葉有]

(54) **Title**: CONTENT DISTRIBUTION SYSTEM

(54) 発明の名称 : コンテンツ配信システム

[図20]



RC CONTENT STORAGE UNIT
1 CONTENT DISTRIBUTION SYSTEM
101 TRANSMISSION REQUEST RECEPTION UNIT
102 ADVERTISING CONTENT SELECTION UNIT
103 SELECTED ADVERTISING CONTENT SPECIFICATION INFORMATION TRANSMISSION UNIT

(57) **Abstract**: This system (1) contains an application server system (AP system) (4) and a connection control system (3). The connection control system (3) establishes a connection between the AP system (4) and a user terminal (2) based on terminal specification information transmitted by the user terminal (2). The AP system (4) receives content transmission requests which are transmitted by the user terminal (2) containing information that identifies main content. The AP system (4) selects advertising content based on information used for selection of advertising. The AP system (4) transmits to the user terminal (2) information specifying the selected advertising content.

(57) 要約: このシステム１は、アプリケーションサーバシステム（ＡＰシステム）４と接続制御システム３とを含む。接続制御システム３は、ユーザ端末２により送信された端末特定情報に基づいてＡＰシステム４とユーザ端末２との間の接続を確立する。ＡＰシステム４は、ユーザ端末２により送信され且つメインコンテンツを識別する情報を含むコンテンツ送信要求を受信する。ＡＰシステム４は、広告選択用情報に基づいて広告コンテンツを選択する。ＡＰシステム４は、選択された広告コンテンツを特定する情報をユーザ端末２へ送信する。

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CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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明　細　書

発明の名称 ： コンテンツ配信システム

技術分野

[0001] 本発明は、コンテンツを表すコンテンツデータをユーザ端末へ送信するコンテンツ配信システムに関する。

背景技術

[0002] コンテンツ送信装置と、コンテンツ受信装置と、接続制御装置（ＳＩＰ（Ｓｅｓｓｉｏｎ　Ｉｎｉｔｉａｔｉｏｎ　Ｐｒｏｔｏｃｏｌ）サーバ）と、を含むコンテンツ配信システムが知られている。

[0003] このコンテンツ配信システムにおいて、コンテンツ受信装置は、接続制御装置へコンテンツ送信要求を送信する。接続制御装置は、コンテンツ送信要求に応じて、コンテンツ送信指示をコンテンツ送信装置へ送信するとともに、コンテンツ送信装置とコンテンツ受信装置との間の接続（セッション）を確立する。更に、コンテンツ配信システムは、コンテンツ送信装置とコンテンツ受信装置との間の通信経路の通信帯域を予約する処理を行う。そして、コンテンツ送信装置は、接続制御装置により接続が確立された場合に、予め記憶されたコンテンツデータをコンテンツ受信装置へ送信する。

[0004] このコンテンツ配信システムによれば、コンテンツ送信装置とコンテンツ受信装置との間の通信経路の通信帯域が確保されるので、コンテンツ送信装置からコンテンツ受信装置へコンテンツデータを送信する際の通信品質が低下することを防止することができる。

先行技術文献

特許文献

[0005] 特許文献1：特開２００８－１５３８９６号公報

発明の概要

発明が解決しようとする課題

[0006] ところで、上記コンテンツ配信システムにおいて、コンテンツ送信装置は

、予め記憶されたコンテンツデータをコンテンツ受信装置からの要求に応じて送信する。

[0007] 従って、コンテンツ受信装置のユーザが視聴することを希望するメインコンテンツ（視聴希望コンテンツ）に、広告コンテンツを挿入した視聴用コンテンツを、そのユーザに視聴させるためには、コンテンツ送信装置がその視聴用コンテンツを表す視聴用コンテンツデータを予め記憶しておくように上記コンテンツ配信システムを構成することが好適であると考えられる。

[0008] しかしながら、このように構成されたコンテンツ配信システムであっても、視聴希望コンテンツ及び／又はユーザに応じて、メインコンテンツに挿入される広告コンテンツを変更することができない。即ち、上記コンテンツ配信システムによれば、視聴希望コンテンツ及び／又はユーザに応じた広告コンテンツをユーザに視聴させることができないという問題があった。

[0009] このため、本発明の目的は、上述した課題である「視聴希望コンテンツ及び／又はユーザに応じた広告コンテンツをユーザに視聴させることができないこと」を解決することが可能なコンテンツ配信システムを提供することにある。

課題を解決するための手段

[0010] かかる目的を達成するため本発明の一形態であるコンテンツ配信システムは、

アプリケーションサーバシステムと接続制御システムとを含み、

上記接続制御システムは、ユーザ端末により送信された端末特定情報を受信し当該受信した端末特定情報に基づいて上記アプリケーションサーバシステムと当該ユーザ端末との間の接続を確立するように構成され、

上記アプリケーションサーバシステムは、

広告コンテンツを表す広告コンテンツデータ、及び、メインコンテンツを表すメインコンテンツデータ、を記憶するコンテンツ記憶手段と、

上記メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つ上記ユーザ端末により送信されたコンテンツ送信要求を、上記接続制御

システムを介して受信する送信要求受信手段と、

上記広告コンテンツの属性を表す広告属性情報を含む広告選択用情報に基づいて、上記記憶されている広告コンテンツデータを選択する広告コンテンツ選択手段と、

上記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ、上記接続制御システムを介して送信する選択広告コンテンツ特定情報送信手段と、

を備える。

[0011] また、本発明の他の形態であるコンテンツ配信システムは、

アプリケーションサーバシステムと接続制御システムとを含み、

上記接続制御システムは、ユーザ端末（Ｕｓｅｒ　Ｅｑｕｉｐｍｅｎｔ）により送信された端末特定情報を受信し当該受信した端末特定情報に基づいて上記アプリケーションサーバシステムと当該ユーザ端末との間の接続を確立するコアＩＭＳ部（Ｃｏｒｅ　ＩＭＳ（Ｉｎｔｅｒｎｅｔ　Ｐｒｏｔｏｃｏｌ　Ｍｕｌｔｉｍｅｄｉａ　Ｓｕｂｓｙｓｔｅｍ））を備え、

上記アプリケーションサーバシステムは、

上記コアＩＭＳ部により接続が確立された上記ユーザ端末へ、コンテンツを表すコンテンツデータを送信するメディア機能部（Ｍｅｄｉａ　Ｆｕｎｃｔｉｏｎｓ）と、

上記メディア機能部により提供されるサービスを制御するサービス制御機能部（Ｓｅｒｖｉｃｅ　Ｃｏｎｔｒｏｌ　Ｆｕｎｃｔｉｏｎｓ）と、

上記ユーザ端末のユーザのプロファイル情報を記憶するユーザプロファイルサーバ機能部（Ｕｓｅｒ　Ｐｒｏｆｉｌｅ　Ｓｅｒｖｅｒ　Ｆｕｎｃｔｉｏｎｓ）と、を備え、

上記メディア機能部は、

広告コンテンツを表す広告コンテンツデータ、及び、メインコンテンツを表すメインコンテンツデータ、を記憶するコンテンツ記憶手段を備え、

上記サービス制御機能部は、

上記メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つ上記ユーザ端末により送信されたコンテンツ送信要求を、上記コアＩＭＳ部を介して受信する送信要求受信手段と、

上記広告コンテンツの属性を表す広告属性情報を含み、且つ、上記ユーザプロファイルサーバ機能部、上記サービス制御機能部又は上記接続制御システムにより予め記憶された広告選択用情報に基づいて、上記記憶されている広告コンテンツデータを選択する広告コンテンツ選択手段と、

上記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ、上記コアＩＭＳ部を介して送信する選択広告コンテンツ特定情報送信手段と、

を備える。

[0012] また、本発明の他の形態であるコンテンツ配信方法は、

接続制御システムが、ユーザ端末により送信された端末特定情報を受信し当該受信した端末特定情報に基づいてアプリケーションサーバシステムと当該ユーザ端末との間の接続を確立し、

上記アプリケーションサーバシステムが、メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つ上記ユーザ端末により送信されたコンテンツ送信要求を、上記接続制御システムを介して受信し、

広告コンテンツを表す広告コンテンツデータ、及び、メインコンテンツを表すメインコンテンツデータ、を記憶する記憶装置に記憶されている広告コンテンツデータを、広告コンテンツの属性を表す広告属性情報を含む広告選択用情報に基づいて選択し、

上記アプリケーションサーバシステムが、上記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ、上記接続制御システムを介して送信する方法である。

[0013] また、本発明の他の形態であるプログラムは、

サービス制御サーバに、

メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つユーザ端末により送信されたコンテンツ送信要求を、メディアサーバと当該ユーザ端末との間の接続を確立する接続制御システムを介して受信する送信要求受信手段と、

広告コンテンツの属性を表す広告属性情報を含む広告選択用情報に基づいて、予め記憶装置に記憶されている広告コンテンツデータを選択する広告コンテンツ選択手段と、

上記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ、上記接続制御システムを介して送信する選択広告コンテンツ特定情報送信手段と、

を実現させるためのプログラムである。

[0014] また、本発明の他の形態であるプログラムは、

ユーザ端末に、

選択された広告コンテンツデータを特定する情報であって、アプリケーションサーバシステムにより送信された情報である選択広告コンテンツ特定情報を、当該アプリケーションサーバシステムと当該ユーザ端末との間の接続を確立する接続制御システムを介して受信する選択広告コンテンツ特定情報受信手段と、

上記アプリケーションサーバシステムとの間の接続が上記接続制御システムにより確立されている場合に、メインコンテンツを識別するためのメインコンテンツ識別情報を含むメインコンテンツ視聴要求と、上記受信した選択広告コンテンツ特定情報を含む広告コンテンツ視聴要求と、を当該アプリケーションサーバシステムへ送信するコンテンツ視聴要求送信手段と、

を実現させるためのプログラムである。

発明の効果

[0015] 本発明は、以上のように構成されることにより、視聴希望コンテンツ及び／又はユーザに応じた広告コンテンツをユーザに視聴させることができる。

図面の簡単な説明

[0016] [図1]本発明の第１実施形態に係るコンテンツ配信システムの概略構成を表す図である。

[図2]図１に示したコンテンツ配信システムの機能の概略を表すブロック図である。

[図3]図１に示したユーザ情報管理サーバに記憶されているユーザ基礎情報を示したテーブルである。

[図4]図１に示したコンテンツ配信システムがユーザ端末及びユーザ端末のユーザを認証する際の作動を示したシーケンス図である。

[図5]図１に示したコンテンツ配信システムがユーザ端末のユーザの入力に応じて、視聴用コンテンツデータをユーザ端末へ送信する際の作動を示したシーケンス図である。

[図6]図１に示したコンテンツ配信システムがユーザ端末のユーザの入力に応じて、視聴用コンテンツデータをユーザ端末へ送信する際の作動を示したシーケンス図である。

[図7]コンテンツ送信指示を含むＩＮＶＩＴＥメッセージを示した図である。

[図8]第１実施形態の変形例に係る、コンテンツ送信指示を含むＩＮＶＩＴＥメッセージを示した図である。

[図9]第１実施形態の変形例に係る、コンテンツ送信指示を含むＩＮＶＩＴＥメッセージを示した図である。

[図10]第１実施形態の変形例に係る、コンテンツ送信指示を含むＩＮＶＩＴＥメッセージを示した図である。

[図11]第１実施形態の変形例に係る、コンテンツ送信指示を含むＩＮＶＩＴＥメッセージを示した図である。

[図12]第１実施形態の第１変形例に係るコンテンツ配信システムがユーザ端末のユーザの入力に応じて、視聴用コンテンツデータをユーザ端末へ送信する際の作動を示したシーケンス図である。

[図13]第１実施形態の第２変形例に係るコンテンツ配信システムがユーザ端末のユーザの入力に応じて、視聴用コンテンツデータをユーザ端末へ送信す

る際の作動を示したシーケンス図である。

[図14]本発明の第２実施形態に係るコンテンツ配信システムの機能の概略を表すブロック図である。

[図15]本発明の第２実施形態に係るコンテンツ配信システムがユーザ端末のユーザの入力に応じて、視聴用コンテンツデータをユーザ端末へ送信する際の作動を示したシーケンス図である。

[図16]本発明の第２実施形態に係るコンテンツ送信指示を含むＩＮＶＩＴＥメッセージを示した図である。

[図17]本発明の第３実施形態に係るコンテンツ配信システムの機能の概略を表すブロック図である。

[図18]本発明の第３実施形態に係るコンテンツ配信システムがユーザ端末のユーザの入力に応じて、視聴用コンテンツデータをユーザ端末へ送信する際の作動を示したシーケンス図である。

[図19]本発明の第３実施形態に係るコンテンツ送信指示を含むＩＮＶＩＴＥメッセージを示した図である。

[図20]本発明の第４実施形態に係るコンテンツ配信システムの機能の概略を表すブロック図である。

発明を実施するための形態

[0017] 以下、本発明に係る、コンテンツ配信システム、コンテンツ配信方法、及び、プログラム、の各実施形態について図１～図２０を参照しながら説明する。

[0018] ＜第１実施形態＞

（構成）

図１に示したように、第１実施形態に係るコンテンツ配信システム１は、ビデオオンデマンド（Ｖｉｄｅｏ　ｏｎ　Ｄｅｍａｎｄ）システムである。なお、コンテンツ配信システム１は、コンテンツの放送を行うＩＰＴＶ（Ｉｎｔｅｒｎｅｔ　Ｐｒｏｔｏｃｏｌ　Ｔｅｌｅｖｉｓｉｏｎ）システムであってもよい。

[0019] コンテンツ配信システム１は、接続制御システム３と、アプリケーションサーバシステム４と、を含む。接続制御システム３は、接続制御サーバ３ａ及び接続制御サーバ３ｂを含む複数のサーバを含む。アプリケーションサーバシステム４は、サービス制御サーバ４ａ、メディアサーバ４ｂ及びユーザ情報管理サーバ４ｃを含む複数のサーバを含む。

[0020] 接続制御サーバ３ａは、ＩＰ（Ｉｎｔｅｒｎｅｔ　Ｐｒｏｔｏｃｏｌ）網を構成するユーザ側通信回線ＮＷ１を介して、ユーザ端末（ＵＥ；Ｕｓｅｒ　Ｅｑｕｉｐｍｅｎｔ）２と通信可能に接続されている。接続制御サーバ３ｂ及びアプリケーションサーバシステム４は、上記ＩＰ網を構成するサービス提供者側通信回線ＮＷ２を介して、互いに通信可能に接続されている。

[0021] ユーザ端末２は、図示しないセットトップボックス及びリモートコントローラを備える。セットトップボックスは、図示しないテレビ受像機に接続されている。セットトップボックスは、メディアサーバ４ｂから送信されたコンテンツ（本例では、音声及び映像からなる動画）を表すコンテンツデータを受信し、受信したコンテンツデータを変換することによりテレビ受像機に当該コンテンツを出力させる。

[0022] リモートコントローラは、複数のボタン（ボタン式スイッチ）を備える。リモートコントローラは、ボタンがユーザにより押し込まれた場合に、そのボタンに応じた赤外線信号をセットトップボックスへ送信する。セットトップボックスは、リモートコントローラから赤外線信号を受信することにより、ユーザにより入力された情報を受け付ける。

[0023] また、ユーザ端末２は、端末（自端末）を特定するための情報である端末特定情報を記憶装置としてのメモリに記憶させている。

[0024] 接続制御サーバ３ａ、接続制御サーバ３ｂ、サービス制御サーバ４ａ、メディアサーバ４ｂ及びユーザ情報管理サーバ４ｃ（サーバ３ａ～４ｃ）のそれぞれは、図示しない中央処理装置（ＣＰＵ；Ｃｅｎｔｒａｌ　Ｐｒｏｃｅｓｓｉｎｇ　Ｕｎｉｔ）及び記憶装置（メモリ及びハードディスク駆動装置（ＨＤＤ））を備える。各サーバ３ａ～４ｃは、記憶装置に記憶されている

プログラムをＣＰＵが実行することにより、後述する機能を実現するように構成されている。

[0025] 接続制御サーバ３ａ及び接続制御サーバ３ｂのそれぞれは、ＳＩＰメッセージ（ＳＩＰ（Ｓｅｓｓｉｏｎ Ｉｎｉｔｉａｔｉｏｎ Ｐｒｏｔｏｃｏｌ）に従ったメッセージ）を授受（受信及び送信）することにより、複数の装置間の接続を制御するように構成されている。即ち、接続制御サーバ３ａ及び接続制御サーバ３ｂのそれぞれは、ＳＩＰサーバである。

[0026] 接続制御システム３は、ユーザ端末２により送信された端末特定情報を含むＳＩＰメッセージを受信すると、当該受信したＳＩＰメッセージに含まれる端末特定情報に基づいてアプリケーションサーバシステム４とユーザ端末２との間の接続（セッション）を確立するように構成されている。

[0027] サービス制御サーバ４ａは、メディアサーバ４ｂにより提供されるサービス（コンテンツデータを送信するサービス）を制御する。メディアサーバ４ｂは、接続制御システム３により接続が確立されたユーザ端末２へ、コンテンツを表すコンテンツデータを送信する。ユーザ情報管理サーバ４ｃは、ユーザ端末２のユーザのプロファイル情報を予め記憶するとともに、記憶しているプロファイル情報をサービス制御サーバ４ａへ送信する。

[0028] （機能）

図２は、上記のように構成されたコンテンツ配信システム１の機能を表すブロック図である。

[0029] （機能：ユーザ端末）

ユーザ端末２の機能は、要求送信部１１と、プレイリスト受信部（選択広告コンテンツ特定情報受信手段）１２と、視聴要求送信部（コンテンツ視聴要求送信手段）１３と、コンテンツ出力部（コンテンツ出力手段）１４と、を含む。

[0030] 要求送信部１１は、ユーザ端末２の電源スイッチの状態がオン状態に設定される（電力が供給される）と、記憶している端末特定情報を含む端末認証処理要求としてのＳＩＰメッセージを接続制御サーバ３ａへ送信する。

[0031] また、要求送信部１１は、接続制御システム３から端末認証成功情報を含むＳＩＰメッセージを受信する。端末認証成功情報は、ＩＰ網上の位置を表す端末アドレス情報を含み、その端末アドレス情報が表す位置のユーザ端末２が正当な端末であることが認証された旨を表す情報である。

[0032] 更に、要求送信部１１は、ユーザ端末２のユーザによりリモートコントローラを介して入力されたユーザ認証用情報を含むＳＩＰメッセージをユーザ認証処理要求として接続制御システム３へ送信する。本例では、ユーザ認証用情報は、ユーザ端末２のユーザを識別するための文字列を表すユーザ識別情報と、パスワードとしての文字列を表すパスワード情報と、からなる。

[0033] また、要求送信部１１は、接続制御システム３からユーザ認証成功情報を含むＳＩＰメッセージを受信する。ユーザ認証成功情報は、ユーザ識別情報を含み、そのユーザ識別情報により識別されるユーザ（即ち、ユーザ認証用情報を入力したユーザ）が正当なユーザであることが認証された旨を表す情報である。

[0034] 要求送信部１１は、接続制御システム３からユーザ認証成功情報を受信した場合、ユーザ端末２のユーザにより入力された要求送信指示に応じて、アプリケーションサーバシステムに対して処理の実行を要求する処理要求を含むＳＩＰメッセージを接続制御システム３へ送信する。処理要求は、ユーザ認証成功情報（即ち、ユーザ識別情報）を含む。

[0035] プレイリスト受信部１２は、接続制御システム３（後述するコアＩＭＳ部３０）を介してアプリケーションサーバシステム４（後述するサービス制御機能部４０）により送信されたプレイリスト情報を受信する。

[0036] 本例では、プレイリスト情報は、コンテンツを識別するためのコンテンツ識別情報と、そのコンテンツ識別情報により識別されるコンテンツの再生開始位置及び再生終了位置と、の組からなるコンテンツ要素情報を複数含む。ここで、コンテンツ識別情報は、メインコンテンツを識別するためのメインコンテンツ識別情報、又は、広告コンテンツを識別するための広告コンテンツ識別情報（選択広告コンテンツ特定情報）である。

[0037] 更に、プレイリスト情報は、コンテンツ（メインコンテンツ識別情報により識別されるメインコンテンツ及び選択広告コンテンツ特定情報により特定される広告コンテンツ）が出力される順序（コンテンツの出力順序）を表す情報を含む情報である。

[0038] 視聴要求送信部１３は、ユーザ端末２とアプリケーションサーバシステム４との間の接続が接続制御システム３（後述するコアＩＭＳ部３０）により確立されている場合に、プレイリスト受信部１２により受信されたプレイリスト情報に基づいて、メインコンテンツ視聴要求及び広告コンテンツ視聴要求をアプリケーションサーバシステム４へ送信する。

[0039] メインコンテンツ視聴要求は、メインコンテンツ識別情報と再生開始位置とを含む。広告コンテンツ視聴要求は、広告コンテンツ識別情報（選択広告コンテンツ特定情報）と再生開始位置とを含む。

[0040] 具体的には、視聴要求送信部１３は、プレイリスト受信部１２により受信されたプレイリスト情報が表すコンテンツの出力順序に従って、コンテンツ視聴要求（メインコンテンツ視聴要求又は広告コンテンツ視聴要求）を１つずつ所定のタイミングにて送信する。

[0041] 本例では、視聴要求送信部１３は、後述するコンテンツ出力部１４により出力中のコンテンツの再生位置が、プレイリスト情報にて当該コンテンツと対応付けられた再生終了位置よりも所定の時間だけ前の位置に到達したとき、当該コンテンツの次に出力されるようにプレイリスト情報において定められたコンテンツに係るコンテンツ視聴要求をアプリケーションサーバシステム４へ送信する。

[0042] 更に、視聴要求送信部１３は、後述するコンテンツ出力部１４により出力中のコンテンツの再生位置が、プレイリスト情報にて当該コンテンツと対応付けられた再生終了位置に到達したとき、当該コンテンツを表すコンテンツデータの送信の停止を要求する再生停止要求をアプリケーションサーバシステム４へ送信するとともに、当該コンテンツの次に出力されるようにプレイリスト情報において定められたコンテンツを表すコンテンツデータの送信の

開始を要求する再生開始要求をアプリケーションサーバシステム４へ送信する。

[0043] コンテンツ出力部１４は、アプリケーションサーバシステム４により送信されたコンテンツデータを受信し、受信したコンテンツデータが表すコンテンツを出力する（本例では、テレビ受像機に出力させる）。即ち、コンテンツ出力部１４は、メインコンテンツデータ及び広告コンテンツデータを受信し、当該受信したメインコンテンツデータ及び広告コンテンツデータに基づいて、当該メインコンテンツデータが表すメインコンテンツに当該広告コンテンツデータが表す広告コンテンツを挿入した視聴用コンテンツを出力する、と言うことができる。

[0044] （機能：接続制御システム）

接続制御システム３の機能は、コアＩＭＳ部（Ｃｏｒｅ　ＩＭＳ（Ｉｎｔｅｒｎｅｔ　Ｐｒｏｔｏｃｏｌ　Ｍｕｌｔｉｍｅｄｉａ　Ｓｕｂｓｙｓｔｅｍ））３０及びトランスポート機能部（ＴＦ（Ｔｒａｎｓｐｏｒｔ　Ｆｕｎｃｔｉｏｎ））８０を含む。

[0045] コアＩＭＳ部３０は、呼接続制御部３１と、ＩＭＳ認証部（ユーザ認証手段）３２と、を含む。また、トランスポート機能部８０は、帯域確保部８１と、端末認証部８２と、を含む。

[0046] 呼接続制御部３１は、ＳＩＰメッセージを授受（受信及び送信）することにより、複数の装置間の接続を制御する。

[0047] また、端末認証部８２は、接続制御サーバ３ａがユーザ端末２から端末認証処理要求を受信した場合、受信した端末認証処理要求に含まれる端末特定情報と、端末認証用基準情報と、が対応（本例では、一致）しているか否かを判定することにより、ユーザ端末２が正当な端末であるか否かを認証する（端末認証処理を行う）。ここで、端末認証用基準情報は、接続制御サーバ３ａが備える記憶装置に予め記憶された情報である。なお、端末認証用基準情報は、ユーザ情報管理サーバ４ｃが備える記憶装置（後述するユーザプロファイルサーバ機能部５０）に記憶されていてもよい。

[0048] 端末認証部８２は、ユーザ端末２が正当な端末であると認証された場合、端末認証成功情報を含むＳＩＰメッセージをユーザ端末２へ送信する。

また、呼接続制御部３１は、端末認証部８２により、ユーザ端末２が正当な端末であると認証された場合、以降において、ユーザ端末２から送信されたメッセージ（処理要求等）に基づく処理（例えば、アプリケーションサーバシステム４へメッセージを転送する処理）を行う。

[0049] 一方、呼接続制御部３１は、端末認証部８２により、ユーザ端末２が正当な端末であると認証されなかった場合、以降において、ユーザ端末２から送信されたメッセージ（処理要求等）に基づく処理を行わない。

[0050] 更に、ＩＭＳ認証部３２は、接続制御サーバ３ａがユーザ端末２からユーザ認証処理要求を受信した場合、受信したユーザ認証処理要求に含まれるユーザ認証用情報と、ユーザ認証用基準情報と、が対応しているか否かを判定することにより、そのユーザ認証用情報を入力したユーザ（ユーザ認証用情報に含まれるユーザ識別情報により識別されるユーザ）が正当なユーザである（ユーザ識別情報により識別されるユーザがユーザ端末２のユーザと一致する）か否かを認証する（ユーザ認証処理を行う）。ここで、ユーザ認証用基準情報は、ユーザ情報管理サーバ４ｃが備える記憶装置（後述するユーザプロファイルサーバ機能部５０）に予め記憶された情報である。即ち、ユーザプロファイルサーバ機能部５０は、ユーザ認証用基準情報記憶手段を構成している。

[0051] そして、呼接続制御部３１は、ＩＭＳ認証部３２により、ユーザ認証用情報を入力したユーザが正当なユーザであると認証された場合、ユーザ端末２へユーザ認証成功情報を含むＳＩＰメッセージを送信する。一方、呼接続制御部３１は、ＩＭＳ認証部３２により、ユーザ認証用情報を入力したユーザが正当なユーザであると認証されなかった場合、ユーザ端末２へユーザ認証成功情報を含むＳＩＰメッセージを送信しない。

[0052] 更に、呼接続制御部３１は、サービス制御サーバ４ａから帯域確保指示を受信した場合、メディアサーバ４ｂとユーザ端末２との間の接続を確立する

。帯域確保指示は、メディアサーバ４ｂを特定するためのメディア配信特定情報と、通信帯域を表す通信帯域情報と、を含む。呼接続制御部３１は、受信した通信帯域情報と、受信したメディア配信特定情報により特定されるメディアサーバ４ｂとユーザ端末２との間の通信経路を特定する通信経路特定情報と、をトランスポート機能部８０へ送信する。

[0053] 帯域確保部８１は、呼接続制御部３１から通信帯域情報及び通信経路特定情報を受信し、受信した通信経路特定情報により特定される通信経路にて、受信した通信帯域情報が表す通信帯域を確保するための処理（帯域確保処理）を行う。

[0054] （機能：ユーザ情報管理サーバ）

一方、ユーザ情報管理サーバ４ｃの機能は、ユーザプロファイルサーバ機能部（ＵＰＳＦ；Ｕｓｅｒ Ｐｒｏｆｉｌｅ Ｓｅｒｖｅｒ Ｆｕｎｃｔｉｏｎｓ）５０を含む。

ユーザプロファイルサーバ機能部５０は、ユーザ端末２のユーザのプロファイル情報を記憶している。ユーザプロファイルサーバ機能部５０は、ユーザ基礎情報記憶部５１を含む。

[0055] ユーザ基礎情報記憶部５１は、ユーザ端末２のユーザを識別するためのユーザ識別情報と対応付けて、ユーザ基礎情報を記憶している。ユーザ基礎情報は、広告コンテンツの属性（本例では、広告コンテンツのカテゴリー（例えば、自動車、不動産、旅行、保険、携帯電話、コーヒー、小道具等））を表す広告属性情報を特定するための情報である。本例では、ユーザ基礎情報は、図３に示したように、広告属性情報と、優先度（本例では、優先度が高くなるほど大きくなる整数）を表す優先度情報と、の組を複数含む。ユーザ基礎情報は、広告選択用情報の一部を構成している。

[0056] （機能：サービス制御サーバ）

一方、サービス制御サーバ４ａの機能は、サービス制御機能部（ＳＣＦ；Ｓｅｒｖｉｃｅ Ｃｏｎｔｒｏｌ Ｆｕｎｃｔｉｏｎｓ）４０を含む。

[0057] サービス制御機能部４０は、情報送受信部（送信要求受信手段及び選択広

告コンテンツ特定情報送信手段）４１と、コンテンツ基礎情報記憶部４２と、広告属性情報記憶部（コンテンツ記憶手段の一部、コンテンツ記憶処理工程の一部）４３と、広告挿入情報記憶部４４と、プレイリスト生成部（広告コンテンツ選択手段）４５と、配信要求部４６と、を含む。

[0058] 情報送受信部４１は、コアＩＭＳ部３０を介して（コアＩＭＳ部３０を経由させて）、ユーザ端末２又はメディアサーバ４ｂから送信された種々の情報（要求、指示及び通知等）を受信する。また、情報送受信部４１は、コアＩＭＳ部３０を介して、種々の情報をユーザ端末２又はメディアサーバ４ｂへ送信する。なお、本例では、種々の情報は、ＳＩＰメッセージに含まれる。

[0059] なお、サービス制御サーバ４ａは、ユーザ端末２から、ユーザ認証成功情報を含む処理要求を受信した場合に限って、その処理要求に基づく処理を行う。即ち、アプリケーションサーバシステム４は、ＩＭＳ認証部３２により、ユーザ認証用情報を入力したユーザが正当なユーザであると認証された場合に、処理要求に基づく処理を行う、と言うことができる。

[0060] コンテンツ基礎情報記憶部４２は、メインコンテンツを識別するためのメインコンテンツ識別情報と対応付けて、コンテンツ基礎情報を記憶している。コンテンツ基礎情報は、広告属性情報を特定するための情報である。本例では、コンテンツ基礎情報は、ユーザ基礎情報と同様に、広告属性情報と優先度情報との組を複数含む。コンテンツ基礎情報は、広告選択用情報の一部を構成している。

[0061] 広告属性情報記憶部４３は、広告コンテンツを識別するための広告コンテンツ識別情報と、広告属性情報と、を対応付けて記憶している。

[0062] 広告挿入情報記憶部４４は、メインコンテンツ識別情報と、挿入数情報と、挿入位置情報と、を対応付けて記憶している。挿入数情報は、メインコンテンツ内に挿入される広告コンテンツの数である挿入数を表す情報である。挿入位置情報は、メインコンテンツ内の位置であって広告コンテンツを挿入するための位置（本例では、メインコンテンツの先頭からの再生時間）であ

る挿入位置を表す情報である。

[0063] プレイリスト生成部４５は、情報送受信部４１により受信された処理要求としてのコンテンツ送信要求を受け付ける。コンテンツ送信要求は、ユーザ端末２により送信され、且つ、ユーザ認証成功情報（即ち、ユーザ識別情報）、端末アドレス情報及びメインコンテンツ識別情報を含む情報である。

[0064] プレイリスト生成部４５は、ユーザ基礎情報記憶部５１に記憶されているユーザ基礎情報のうちの、情報送受信部４１により受信されたコンテンツ送信要求に含まれるユーザ識別情報と対応付けて記憶されているユーザ基礎情報を取得する。

[0065] 更に、プレイリスト生成部４５は、コンテンツ基礎情報記憶部４２に記憶されているコンテンツ基礎情報のうちの、コンテンツ送信要求に含まれるメインコンテンツ識別情報と対応付けて記憶されているコンテンツ基礎情報を取得する。

[0066] そして、プレイリスト生成部４５は、上記取得したユーザ基礎情報に含まれる優先度情報が表す優先度と、上記取得したコンテンツ基礎情報に含まれる優先度情報が表す優先度と、を、広告属性情報毎に合算することにより、広告属性情報毎の最終優先度を算出する。

[0067] 次いで、プレイリスト生成部４５は、広告属性情報記憶部４３により記憶されている広告コンテンツ識別情報のうちの、上記算出した最終優先度が最大である広告属性情報と対応付けられた広告コンテンツ識別情報を抽出する。

[0068] 一方、プレイリスト生成部４５は、広告挿入情報記憶部４４に記憶されている挿入数情報及び挿入位置情報のうちの、コンテンツ送信要求に含まれるメインコンテンツ識別情報と対応付けて記憶されている挿入数情報及び挿入位置情報を取得する。

[0069] そして、プレイリスト生成部４５は、上記抽出した広告コンテンツ識別情報の中から、上記取得した挿入数情報が表す数だけ、広告コンテンツ識別情報を選択する。

このように、プレイリスト生成部４５は、コンテンツ送信要求を送信してきたユーザ端末２のユーザを識別するためのユーザ識別情報と対応付けられたユーザ基礎情報と、コンテンツ送信要求に含まれるメインコンテンツ識別情報と対応付けられたコンテンツ基礎情報と、に基づいて特定される広告属性情報と対応付けて記憶されている広告コンテンツデータを選択している、と言うことができる。

[0070] 次いで、プレイリスト生成部４５は、選択した広告コンテンツ識別情報（即ち、選択した広告コンテンツデータを特定するための選択広告コンテンツ特定情報）と、コンテンツ送信要求に含まれるメインコンテンツ識別情報と、上記取得した挿入位置情報と、に基づいてプレイリスト情報を生成する。

[0071] 即ち、プレイリスト情報は、コンテンツ送信要求に含まれるメインコンテンツ識別情報と、プレイリスト生成部４５により選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報と、を含む情報である、と言うことができる。

[0072] 配信要求部４６は、コンテンツ送信指示を出力する。コンテンツ送信指示は、プレイリスト生成部４５により生成されたプレイリスト情報と、コンテンツ送信要求に含まれるユーザ認証成功情報（即ち、ユーザ識別情報）、端末アドレス情報及びメインコンテンツ識別情報と、を含む。

[0073] 情報送受信部４１は、配信要求部４６により出力されたコンテンツ送信指示をコアＩＭＳ部３０を介してメディアサーバ４ｂへ送信する。

更に、情報送受信部４１は、メディアサーバ４ｂにより送信された送信許可通知を受信すると、プレイリスト生成部４５により生成されたプレイリスト情報をコアＩＭＳ部３０を介してユーザ端末２へ送信する。送信許可通知は、メディアサーバ（本例では、メディアサーバ４ｂ）を特定するためのメディア配信特定情報と、プレイリスト情報と、を含む。

[0074] （機能：メディアサーバ）

メディアサーバ４ｂの機能は、メディア機能部（ＭＦ；Ｍｅｄｉａ Ｆｕｎｃｔｉｏｎｓ）６０を含む。メディア機能部６０は、メディア制御機能部

（ＭＣＦ；Ｍｅｄｉａ　Ｃｏｎｔｒｏｌ　Ｆｕｎｃｔｉｏｎｓ）、及び、メディア配信機能部（ＭＤＦ；Ｍｅｄｉａ　Ｄｅｌｉｖｅｒｙ　Ｆｕｎｃｔｉｏｎｓ）を含む。

[0075] メディア機能部６０は、情報送受信部６１と、コンテンツデータ記憶部（コンテンツ記憶手段の一部、コンテンツ記憶処理工程の一部）６２と、コンテンツ配信制御部６３と、コンテンツ配信部（コンテンツ送信手段）６５と、を含む。

[0076] 情報送受信部６１は、サービス制御サーバ４ａから送信された種々の情報をコアＩＭＳ部３０を介して受信する。具体的には、情報送受信部６１は、サービス制御サーバ４ａから送信されたコンテンツ送信指示等をコアＩＭＳ部３０を介して受信する。また、情報送受信部６１は、種々の情報をサービス制御サーバ４ａへコアＩＭＳ部３０を介して送信する。具体的には、情報送受信部６１は、送信許可通知等をサービス制御サーバ４ａへコアＩＭＳ部３０を介して送信する。

[0077] コンテンツデータ記憶部６２は、メインコンテンツを表すメインコンテンツデータと、当該メインコンテンツを識別するためのメインコンテンツ識別情報と、を対応付けて記憶する。更に、コンテンツデータ記憶部６２は、広告コンテンツを表す広告コンテンツデータと、当該広告コンテンツを識別するための広告コンテンツ識別情報と、を対応付けて記憶する。

[0078] コンテンツ配信制御部６３は、ユーザ端末２からメインコンテンツ視聴要求を受信する。メインコンテンツ視聴要求は、メインコンテンツ識別情報と再生開始位置とユーザ識別情報とを含む。更に、コンテンツ配信制御部６３は、ユーザ端末２から広告コンテンツ視聴要求を受信する。広告コンテンツ視聴要求は、広告コンテンツ識別情報と再生開始位置とユーザ識別情報とを含む。

[0079] また、コンテンツ配信制御部６３は、ユーザ端末２から再生開始要求を受信する。加えて、コンテンツ配信制御部６３は、ユーザ端末２から再生停止要求を受信する。

[0080] コンテンツ配信部６５は、コンテンツ配信制御部６３により再生開始要求が受信されると、コンテンツ視聴要求により識別されるコンテンツデータを、コンテンツ視聴要求に含まれる再生開始位置から、ユーザ端末２へ送信する。

[0081] このとき、コンテンツ配信部６５は、コアＩＭＳ部３０により確立されたセッションを用いて、所定の通信プロトコル（本例では、ＲＴＰ（Ｒｅａｌ－ｔｉｍｅ Ｔｒａｎｓｐｏｒｔ Ｐｒｏｔｏｃｏｌ））に従ってデータを送信する。

[0082] 即ち、コンテンツ配信部６５は、コンテンツ送信要求を送信してきたユーザ端末２とメディアサーバ４ｂとの間の接続が接続制御システム３により確立されている場合に、コンテンツデータ記憶部６２により記憶させられているコンテンツデータ（メインコンテンツデータ及び広告コンテンツデータ）を当該ユーザ端末２へ送信する、と言うことができる。

[0083] また、コンテンツ配信部６５は、コンテンツ配信制御部６３により再生停止要求が受信されると、送信中のコンテンツデータの送信を停止する。

[0084] （作動）

次に、上述したコンテンツ配信システム１の作動について具体的に述べる。

[0085] （作動：認証処理）

コンテンツ配信システム１がユーザ端末２のユーザを認証する際のコンテンツ配信システム１の作動について、図４のシーケンス図を参照しながら説明する。

[0086] 先ず、ユーザがユーザ端末２の電源スイッチの状態をオン状態に設定することにより、ユーザ端末２に電力が供給される。これにより、ユーザ端末２は、記憶している端末特定情報を含む端末認証処理要求を接続制御サーバ３ａ（トランスポート機能部８０）へ送信する（ステップＡ４０１）。

[0087] トランスポート機能部８０は、受信した端末認証処理要求に含まれる端末特定情報と、予め記憶された端末認証用基準情報と、が対応（本例では、一

致）しているか否かを判定することにより、ユーザ端末２が正当な端末であるか否かを認証（端末認証処理を実行）する（ステップＢ４０１）。そして、トランスポート機能部８０は、ユーザ端末２が正当な端末であると認証された場合、端末認証成功情報をユーザ端末２へ送信する（ステップＢ４０２）。端末認証成功情報は、端末アドレス情報を含み、且つ、ユーザ端末２が正当な端末であると認証された旨を表す情報である。

[0088] ユーザ端末２は、端末認証成功情報を受信すると、ユーザ認証用情報の入力をユーザＵＡに促す画像を、図示しないテレビ受像機に表示させる。これにより、ユーザＵＡは、リモートコントローラを操作することにより、ユーザ認証用情報を入力する。

[0089] そして、ユーザ端末２は、ユーザ認証用情報の入力を受け付けると、受け付けたユーザ認証用情報を含むユーザ認証処理要求をコアＩＭＳ部３０へ送信する（ステップＡ４０２）。

[0090] これにより、コアＩＭＳ部３０は、ユーザ認証処理要求を受信する。コアＩＭＳ部３０は、受信したユーザ認証処理要求に含まれるユーザ認証用情報と、予め記憶されたユーザ認証用基準情報と、が対応（本例では、一致）しているか否かを判定することにより、ユーザ認証用基準情報に含まれるユーザ識別情報により識別されるユーザ（ユーザ認証用情報を入力したユーザ）が正当なユーザであるか否かを認証（ユーザ認証処理を実行）する（ステップＢ４０３、ユーザ認証工程）。そして、コアＩＭＳ部３０は、ユーザ認証用情報を入力したユーザが正当なユーザであると認証された場合、ユーザ認証成功情報をユーザ端末２へ送信する（ステップＢ４０４）。

[0091] これにより、ユーザ端末２は、ユーザ認証成功情報を受信する。そして、以降において、ユーザ端末２は、ユーザ認証成功情報を含む処理要求（を含むＳＩＰメッセージ）をコアＩＭＳ部３０へ送信する。

[0092] （作動：コンテンツ視聴処理）

次に、コンテンツ配信システム１がユーザ端末２のユーザの入力に応じて、コンテンツデータをユーザ端末２へ送信する際のコンテンツ配信システム

１の作動について、図５及び図６のシーケンス図を参照しながら説明する。

[0093] 先ず、ユーザ端末２のユーザは、視聴可能なコンテンツの一覧を表すコンテンツ一覧情報の送信を要求する処理要求を送信する旨を指示する情報をユーザ端末２に入力する。これにより、ユーザ端末２は、その処理要求をコアＩＭＳ部３０を介してサービス制御サーバ４ａ（サービス制御機能部４０）へ送信する。

[0094] そして、サービス制御機能部４０は、コンテンツデータ記憶部６２に記憶されているメインコンテンツデータが表すメインコンテンツの一覧を表すコンテンツ一覧情報をコアＩＭＳ部３０を介してユーザ端末２へ送信する。ユーザ端末２は、コンテンツ一覧情報を受信すると、受信したコンテンツ一覧情報が表すメインコンテンツの一覧を図示しないテレビ受像機に表示させる。

[0095] なお、コンテンツ配信システム１は、ユーザ端末２とＨＴＴＰ（Ｈｙｐｅｒｔｅｘｔ　Ｔｒａｎｓｆｅｒ　Ｐｒｏｔｏｃｏｌ）に従って通信可能に構成された図示しないポータルサーバからユーザ端末２へコンテンツ一覧情報が送信されるように構成されていてもよい。

[0096] テレビ受像機にメインコンテンツの一覧が表示されている状態において、ユーザ端末２のユーザは、視聴を希望するメインコンテンツを選択し、選択したメインコンテンツを識別するためのメインコンテンツ識別情報を入力する。

[0097] これにより、図５に示したように、ユーザ端末２は、入力されたメインコンテンツ識別情報と、ユーザを識別するためのユーザ識別情報としてのユーザ認証成功情報と、端末アドレス情報と、を含む処理要求としてのコンテンツ送信要求をコアＩＭＳ部３０へ送信する（ステップＡ５０１）。コンテンツ送信要求は、ＳＩＰメッセージのうちのＩＮＶＩＴＥメッセージ（メソッドとして「ＩＮＶＩＴＥ」が設定されたメッセージ）として送信される。

[0098] そして、コアＩＭＳ部３０は、コンテンツ送信要求を受信する。次いで、コアＩＭＳ部３０は、通信帯域を確保するための準備としての帯域予約処理

を行う。そして、コアＩＭＳ部３０は、受信したコンテンツ送信要求をサービス制御機能部４０へ送信する（ステップＢ５０１）。

[0099] 次いで、サービス制御機能部４０は、コンテンツ送信要求を受信する（送信要求受信工程）。そして、サービス制御機能部４０は、受信したコンテンツ送信要求に含まれるユーザ識別情報及びメインコンテンツ識別情報に基づいて、ユーザ基礎情報及びコンテンツ基礎情報を取得する。

[0100] そして、サービス制御機能部４０は、上記取得したユーザ基礎情報と、上記取得したコンテンツ基礎情報と、に基づいて、広告属性情報毎の最終優先度を算出する。更に、サービス制御機能部４０は、広告属性情報記憶部４３に記憶されている広告コンテンツ識別情報の中から、算出した最終優先度が最大である広告属性情報と対応付けられた広告コンテンツ識別情報を抽出する。

[0101] 一方、サービス制御機能部４０は、広告挿入情報記憶部４４に記憶されている挿入数情報及び挿入位置情報のうちの、コンテンツ送信要求に含まれるメインコンテンツ識別情報と対応付けて記憶されている挿入数情報及び挿入位置情報を取得する。

[0102] そして、サービス制御機能部４０は、上記抽出した広告コンテンツ識別情報の中から、上記取得した挿入数情報が表す数だけ、広告コンテンツ識別情報を選択する（広告コンテンツ選択工程）。次いで、サービス制御機能部４０は、選択した広告コンテンツ識別情報と、コンテンツ送信要求に含まれるメインコンテンツ識別情報と、上記取得した挿入位置情報と、に基づいてプレイリスト情報を生成する（ステップＣ５０１）。プレイリスト情報は、メインコンテンツ識別情報と選択広告コンテンツ特定情報とを含む情報である。

[0103] そして、サービス制御機能部４０は、メディアサーバ４ｂ（メディア機能部６０）を選択し、コンテンツ送信指示をコアＩＭＳ部３０を介して、選択したメディア機能部６０へ送信する（ステップＣ５０２）。コンテンツ送信指示は、生成されたプレイリスト情報と、ユーザ識別情報と、端末アドレス

情報と、を含む。

[0104] コンテンツ送信指示は、ＳＩＰメッセージのうちのＩＮＶＩＴＥメッセージとして送信される。図７に示したように、ＩＮＶＩＴＥメッセージは、ヘッダ部ＨＤとボディ部ＢＤとを含む。本例では、プレイリスト情報ＰＬは、ＩＮＶＩＴＥメッセージのうちのヘッダ部ＨＤにてフィールド「Ｘ－ｖｉｄｅｏ－ｓｅｑｕｅｎｃｅ」の値として含まれている。

[0105] 本例では、プレイリスト情報ＰＬは、「，」により区切られた５つのコンテンツ要素情報を含む。第１のコンテンツ要素情報は、「；」により区切られた、メインコンテンツ識別情報としての「ｃｏｎｔｅｎｔ１」と、そのメインコンテンツの再生開始位置としての「０」と、そのメインコンテンツの再生終了位置としての「３００」と、の組からなる。第２のコンテンツ要素情報は、「；」により区切られた、広告コンテンツ識別情報としての「ａｄｖ１」と、その広告コンテンツの再生開始位置としての「０」と、その広告コンテンツの再生終了位置としての「３０」と、の組からなる。第３のコンテンツ要素情報～第５のコンテンツ要素情報も、第１のコンテンツ要素情報及び第２のコンテンツ要素情報と同様である。

[0106] そして、メディア機能部６０は、コンテンツ送信指示を受信する。次いで、メディア機能部６０は、コンテンツ送信指示に含まれるプレイリスト情報及び端末アドレス情報に基づいて、コンテンツデータを送信するメディアサーバを決定する。更に、メディア機能部６０は、送信許可通知をコアＩＭＳ部３０を介してサービス制御機能部４０へ送信する（ステップＤ５０１）。

[0107] 送信許可通知は、決定されたメディアサーバ（本例では、メディアサーバ４ｂ）を特定するためのメディア配信特定情報と、プレイリスト情報と、を含む。送信許可通知は、ＳＩＰメッセージのうちのＯＫメッセージ（ステータスコードとしての「２００」と、「ＯＫ」と、を開始行に含むレスポンス）として送信される。

[0108] これにより、サービス制御機能部４０は、メディア配信特定情報及びプレイリスト情報を受信する。そして、サービス制御機能部４０は、受信したメ

ディア配信特定情報及びプレイリスト情報に基づいて、プレイリスト情報により識別されるコンテンツデータを送信するために必要とされる通信帯域を決定する。

[0109] 更に、サービス制御機能部４０は、決定した通信帯域を表す通信帯域情報と、受信したメディア配信特定情報及びプレイリスト情報と、を含む帯域確保指示をコアＩＭＳ部３０へ送信する（ステップＣ５０３）。帯域確保指示は、ＳＩＰメッセージのうちのＯＫメッセージとして送信される。

[0110] コアＩＭＳ部３０は、帯域確保指示を受信すると、受信した通信帯域情報と、受信したメディア配信特定情報により特定されるメディアサーバ４ｂとユーザ端末２との間の通信経路を特定する通信経路特定情報と、をトランスポート機能部８０へ送信する。これにより、トランスポート機能部８０は、受信した通信経路特定情報により特定される通信経路にて、受信した通信帯域情報が表す通信帯域を確保するための処理（帯域確保処理）を行う。

[0111] そして、コアＩＭＳ部３０は、帯域確保処理が完了すると、送信準備完了通知をユーザ端末２へ送信する（ステップＢ５０２）。送信準備完了通知は、受信されたメディア配信特定情報及びプレイリスト情報を含む。送信準備完了通知は、ＳＩＰメッセージのうちのＯＫメッセージとして送信される。

[0112] このように、帯域確保指示又は送信準備完了通知として送信されるＯＫメッセージは、コアＩＭＳ部３０がユーザ端末２とメディア機能部６０との間の接続を確立するために、コアＩＭＳ部３０がユーザ端末２、サービス制御機能部４０及びメディア機能部６０のそれぞれとの間で授受する接続確立用メッセージの１つである。

[0113] 即ち、サービス制御機能部４０は、接続確立用メッセージに選択広告コンテンツ特定情報を含ませることにより、選択広告コンテンツ特定情報をコアＩＭＳ部３０を介してユーザ端末２へ送信する（選択広告コンテンツ特定情報送信工程）、と言うことができる。

[0114] 換言すると、サービス制御機能部４０は、コアＩＭＳ部３０がユーザ端末２とメディア機能部６０との間の接続を確立するための処理を行う際に、選

択広告コンテンツ特定情報を含むプレイリスト情報をコアＩＭＳ部３０を介してユーザ端末２へ送信する、と言うことができる。

[0115] そして、ユーザ端末２は、送信準備完了通知を受信する（選択広告コンテンツ特定情報受信工程）と、接続準備完了通知をコアＩＭＳ部３０を介してサービス制御機能部４０へ送信する（ステップＡ５０２）。接続準備完了通知は、ＳＩＰメッセージのうちのＡＣＫメッセージ（メソッドとして「ＡＣＫ」が設定されたメッセージ）として送信される。

[0116] サービス制御機能部４０は、接続準備完了通知を受信すると、受信した接続準備完了通知と同様の接続準備完了通知をコアＩＭＳ部３０を介してメディア機能部６０へ送信する（ステップＣ５０４）。この接続準備完了通知も、ＳＩＰメッセージのうちのＡＣＫメッセージとして送信される。

[0117] そして、メディア機能部６０が接続準備完了通知を受信することにより、メディアサーバ４ｂとユーザ端末２との間の接続（セッション）が確立される（ステップＥ５０１）。なお、ステップＡ５０１～ステップＥ５０１の処理は、接続確立工程を構成している。また、コアＩＭＳ部３０は、ＳＩＰメッセージを中継することにより、メディアサーバ４ｂ（メディア機能部６０）とユーザ端末２との間の接続を確立する、と言うことができる。

[0118] なお、ステップＡ５０１～ステップＥ５０１にて、接続制御システム３（コアＩＭＳ部３０）がユーザ端末２、サービス制御サーバ４ａ及びメディアサーバ４ｂのそれぞれとの間で授受するＳＩＰメッセージは、接続制御システム３がユーザ端末２とメディアサーバ４ｂとの間の接続を確立するための接続確立用メッセージである、と言うことができる。

[0119] なお、本例では、ＲＴＳＰ（Ｒｅａｌ Ｔｉｍｅ Ｓｔｒｅａｍｉｎｇ Ｐｒｏｔｏｃｏｌ）に従った通信を行うための接続と、ＲＴＰに従った通信を行うための接続と、の両方が同時に確立される。

[0120] その後、図６に示したように、ユーザ端末２は、受信した送信準備完了通知に含まれるメディア配信特定情報により特定されるメディアサーバ４ｂ（メディア機能部６０）へ、受信した送信準備完了通知に含まれるプレイリス

ト情報ＰＬに基づいてコンテンツ視聴要求を送信する（コンテンツ視聴要求送信工程）。

[0121] 具体的に述べると、ユーザ端末２は、先ず、プレイリスト情報ＰＬにおける先頭のコンテンツ要素情報（即ち、第１のコンテンツ要素情報）に含まれるコンテンツ識別情報（本例では、「ｃｏｎｔｅｎｔ１」）と、そのコンテンツ要素情報に含まれる再生開始位置（本例では、「０」）と、を含むコンテンツ視聴要求（本例では、メインコンテンツ視聴要求）をメディア機能部６０へ送信する（ステップＡ５０３）。

[0122] コンテンツ視聴要求は、更に、ユーザ端末２のユーザを識別するためのユーザ識別情報を含む。コンテンツ視聴要求は、ＲＴＳＰメッセージ（ＲＴＳＰに従ったメッセージ）のうちのＳＥＴＵＰメッセージ（メソッドとして「ＳＥＴＵＰ」が設定されたメッセージ）として送信される。

[0123] そして、メディア機能部６０は、コンテンツ視聴要求を受信する。次いで、メディア機能部６０は、コンテンツデータ記憶部６２に記憶されている広告コンテンツデータ及びメインコンテンツデータのうちの、上記受信したコンテンツ視聴要求に含まれるコンテンツ識別情報により識別されるコンテンツデータを取得する。

[0124] そして、メディア機能部６０は、コンテンツ送信準備完了通知を、コンテンツ視聴要求を送信してきたユーザ端末２へ送信する（ステップＤ５０２）。コンテンツ送信準備完了通知は、ＲＴＳＰメッセージのうちのＯＫメッセージ（ステータスコードとしての「２００」と、「ＯＫ」と、を開始行に含むレスポンス）として送信される。

[0125] そして、ユーザ端末２は、コンテンツ送信準備完了通知を受信すると、上記ステップＡ５０３にて送信したコンテンツ視聴要求に係るコンテンツ（ここでは、メインコンテンツ識別情報「ｃｏｎｔｅｎｔ１」により識別されるメインコンテンツ）の再生開始要求をメディア機能部６０へ送信する（ステップＡ５０４）。再生開始要求は、ＲＴＳＰメッセージのうちのＰＬＡＹメッセージ（メソッドとして「ＰＬＡＹ」が設定されたメッセージ）として送

信される。

[0126] 次いで、メディア機能部６０は、再生開始要求を受信すると、再生開始通知をユーザ端末２へ送信する（ステップＤ５０３）。再生開始通知は、コンテンツデータの送信を開始する旨を表す情報である。再生開始通知は、ＲＴＳＰメッセージのうちのＯＫメッセージとして送信される。

[0127] そして、メディア機能部６０は、上記受信したコンテンツ視聴要求により識別されるコンテンツデータ（ここでは、メインコンテンツデータ）を、当該コンテンツ視聴要求に含まれる再生開始位置（本例では、「０」）から、ユーザ端末２へ送信する（ステップＤ５０４、コンテンツ送信工程）。このとき、メディア機能部６０は、コアＩＭＳ部３０により確立されたセッションを用いて、ＲＴＰに従ってデータを送信する。

[0128] これにより、ユーザ端末２は、コンテンツデータを受信し、受信したコンテンツデータが表すコンテンツ（ここでは、メインコンテンツ識別情報「ｃｏｎｔｅｎｔ１」により識別されるメインコンテンツ）を図示しないテレビ受像機に出力させる（コンテンツ出力工程）。

[0129] その後、ユーザ端末２は、出力中のコンテンツの再生位置が、プレイリスト情報ＰＬにて当該コンテンツと対応付けられた再生終了位置（本例では、「３００」）よりも所定の時間だけ前の位置に到達したとき、プレイリスト情報ＰＬにおいて当該コンテンツに係るコンテンツ要素情報の次に位置するコンテンツ要素情報（即ち、第２のコンテンツ要素情報）に含まれるコンテンツ識別情報（本例では、「ａｄｖ１」）と、そのコンテンツ要素情報に含まれる再生開始位置（本例では、「０」）と、を含むコンテンツ視聴要求（本例では、広告コンテンツ視聴要求）をメディア機能部６０へ送信する（ステップＡ５０５）。

[0130] そして、メディア機能部６０は、コンテンツ視聴要求を受信する。次いで、メディア機能部６０は、上記ステップＤ５０２と同様に、コンテンツ送信準備完了通知を、コンテンツ視聴要求を送信してきたユーザ端末２へ送信する（ステップＤ５０５）。

[0131] そして、ユーザ端末２は、出力中のコンテンツの再生位置が、プレイリスト情報ＰＬにて当該コンテンツと対応付けられた再生終了位置（本例では、「３００」）に到達したとき、当該コンテンツ（即ち、メインコンテンツ）を表すコンテンツデータの送信の停止を要求する再生停止要求をメディア機能部６０へ送信する（ステップＡ５０６）。再生停止要求は、ＲＴＳＰメッセージのうちのＰＡＵＳＥメッセージ（メソッドとして「ＰＡＵＳＥ」が設定されたメッセージ）として送信される。

[0132] 次いで、メディア機能部６０は、再生停止要求を受信すると、コンテンツデータの送信を停止する。

[0133] 更に、ユーザ端末２は、上記ステップＡ５０５にて送信したコンテンツ視聴要求に係るコンテンツ（ここでは、広告コンテンツ識別情報「ａｄｖ１」により識別される広告コンテンツ）の再生開始要求をメディア機能部６０へ送信する（ステップＡ５０７）。

[0134] 次いで、メディア機能部６０は、再生開始要求を受信すると、再生開始通知をユーザ端末２へ送信する（ステップＤ５０６）。そして、メディア機能部６０は、上記受信したコンテンツ視聴要求により識別されるコンテンツデータ（ここでは、広告コンテンツデータ）を、当該コンテンツ視聴要求に含まれる再生開始位置（本例では、「０」）から、ユーザ端末２へ送信する（ステップＤ５０７、コンテンツ送信工程）。

[0135] これにより、ユーザ端末２は、コンテンツデータを受信し、受信したコンテンツデータが表すコンテンツ（ここでは、広告コンテンツ識別情報「ａｄｖ１」により識別される広告コンテンツ）を図示しないテレビ受像機に出力させる。

[0136] ユーザ端末２は、このような処理を繰り返し行うことにより、プレイリスト情報ＰＬに基づいて、メインコンテンツデータが表すメインコンテンツに当該広告コンテンツデータが表す広告コンテンツを挿入した視聴用コンテンツを出力する。

[0137] 以上、説明したように、本発明によるコンテンツ配信システムの第１実施

形態によれば、コンテンツ配信システム１は、広告選択用情報に基づいて選択された広告コンテンツを特定する選択広告コンテンツ特定情報をユーザ端末２へ送信する。従って、広告選択用情報に応じた広告コンテンツが挿入された視聴用コンテンツをユーザに視聴させることができる。

[0138] 更に、上記第１実施形態によれば、ユーザ端末２によってメインコンテンツ及び広告コンテンツが出力される順序を、アプリケーションサーバシステム４に決定させることができる。これにより、広告コンテンツを提供する事業者の意図をより大きく反映した態様にて広告コンテンツをユーザに視聴させることができる。

[0139] 更に、上記第１実施形態において、広告選択用情報は、ユーザ識別情報と対応付けられたユーザ基礎情報を含む。これによれば、コンテンツ配信システム１は、コンテンツ送信要求を送信してきたユーザ端末２のユーザに応じた広告コンテンツが挿入された視聴用コンテンツをユーザに視聴させることができる。

[0140] 加えて、上記第１実施形態において、広告選択用情報は、メインコンテンツ識別情報と対応付けられたコンテンツ基礎情報を含む。これによれば、コンテンツ配信システム１は、受信されたコンテンツ送信要求に含まれるメインコンテンツ識別情報により識別されるメインコンテンツに応じた広告コンテンツが挿入された視聴用コンテンツをユーザに視聴させることができる。

[0141] 更に、上記第１実施形態において、サービス制御機能部４０は、接続制御システム３が接続を確立するための処理を行う際に、選択広告コンテンツ特定情報を含むプレイリスト情報を接続制御システム３を介してユーザ端末２へ送信するように構成されている。これによれば、サービス制御サーバ４ａは、接続制御システム３が接続を確立するための処理を行う時点における最新の広告選択用情報を反映したプレイリスト情報をユーザ端末２へ送信することができる。

[0142] 加えて、上記第１実施形態において、サービス制御機能部４０は、選択広告コンテンツ特定情報を含むプレイリスト情報を接続確立用メッセージに含

ませることにより、プレイリスト情報を接続制御システム３を介してユーザ端末２へ送信するように構成されている。

[0143] これによれば、サービス制御サーバ４ａがプレイリスト情報をユーザ端末２へ送信するために、接続確立用メッセージ以外のメッセージを別途送信する必要がない。即ち、接続制御システム３、サービス制御サーバ４ａ及びユーザ端末２の間の通信回数を減らすことができる。換言すると、接続制御システム３、サービス制御サーバ４ａ及びユーザ端末２がメッセージを授受するための処理負荷、及び／又は、通信負荷を軽減することができる。

[0144] なお、上記第１実施形態は、プレイリスト情報をＩＮＶＩＴＥメッセージのヘッダ部ＨＤに含ませるように構成されていたが、ＩＮＶＩＴＥメッセージの開始行（Ｒｅｑｕｅｓｔ－Ｌｉｎｅ）にプレイリスト情報を含ませるように構成されていてもよい。例えば、図８に示したように、開始行のＲｅｑｕｅｓｔ－ＵＲＩ（要求ＵＲＩ（Ｕｎｉｆｏｒｍ Ｒｅｓｏｕｒｃｅ Ｉｄｅｎｔｉｆｉｅｒ））にプレイリスト情報ＰＬを含ませるように構成されていてもよい。

[0145] また、上記第１実施形態は、プレイリスト情報をＩＮＶＩＴＥメッセージのヘッダ部ＨＤに含ませるように構成されていたが、ＩＮＶＩＴＥメッセージのボディ部ＢＤにプレイリスト情報を含ませるように構成されていてもよい。例えば、図９に示したように、ボディ部ＢＤのＳＤＰ（Ｓｅｓｓｉｏｎ Ｄｅｓｃｒｉｐｔｉｏｎ Ｐｒｏｔｏｃｏｌ）におけるタイプ「ａ」の値のうちの属性「ｖｉｄｅｏｓｅｑｕｅｎｃｅ」の値としてプレイリスト情報ＰＬを含ませるように構成されていてもよい。

[0146] また、上記第１実施形態は、プレイリスト情報をＩＮＶＩＴＥメッセージのヘッダ部ＨＤに含ませるように構成されていたが、ＩＮＶＩＴＥメッセージのボディ部ＢＤが、第１の形式に従った第１の部分と、第２の形式に従った第２の部分と、を含む（即ち、ボディ部ＢＤをマルチパート化する）とともに、第１の部分及び第２の部分の一方にプレイリスト情報を含ませるように構成されていてもよい。

[0147] 例えば、図１０に示したように、ボディ部が、ＳＤＰに従った第１の部分ＢＤ１と、テキスト形式に従った第２の部分ＢＤ２と、を含むとともに、第２の部分ＢＤ２にプレイリスト情報を含ませるように構成されていてもよい。

[0148] また、上記第１実施形態は、プレイリスト情報をＩＮＶＩＴＥメッセージに直接含ませるように構成されていたが、プレイリスト情報を参照するための参照情報をＩＮＶＩＴＥメッセージに含ませるように構成されていてもよい。例えば、図１１に示したように、ボディ部ＢＤのＳＤＰにおけるタイプ「ｕ」の値としてプレイリスト情報を参照（取得）するためのＵＲＩを表す参照情報（実質的にはプレイリスト情報）ＰＬをＩＮＶＩＴＥメッセージに含ませるように構成されていてもよい。

[0149] なお、上記第１実施形態は、ステップＡ５０１～ステップＥ５０１の処理が行われることにより、ＲＴＳＰに従った通信を行うための接続（ＲＴＳＰ用接続）と、ＲＴＰに従った通信を行うための接続（ＲＴＰ用接続）と、の両方が同時に確立されるように構成されていた。ところで、上記第１実施形態の他の変形例において、ステップＡ５０１～ステップＥ５０１の処理が行われることにより、先ず、ＲＴＳＰ用接続が確立され、続いて、ステップＡ５０１～ステップＥ５０１の処理と同様の処理が再び行われることにより、ＲＴＰ用接続が確立されるように構成されていてもよい。

[0150] また、上記第１実施形態において、コンテンツ配信システム１は、メインコンテンツデータ及び広告コンテンツデータを送信するために、ＲＴＰに従った通信を行うための接続（ＲＴＰ用接続）を１つだけ確立するように構成されていたが、メインコンテンツデータを送信するためのＲＴＰ用接続と、広告コンテンツデータを送信するためのＲＴＰ用接続と、からなる２つのＲＴＰ用接続を確立するように構成されていてもよい。

[0151] また、上記第１実施形態においては、サービス制御機能部４０は、メディア機能部６０へプレイリスト情報を送信するように構成されていたが、メディア機能部６０へプレイリスト情報を送信することなく（即ち、コンテンツ

送信指示にプレイリスト情報を含ませることなく）ユーザ端末２のみにプレイリスト情報を送信するように構成されていてもよい。

[0152] ＜第１実施形態の第１変形例＞

次に、本発明の第１実施形態の第１変形例に係るコンテンツ配信システムについて説明する。この第１変形例に係るコンテンツ配信システムは、上記第１実施形態に係るコンテンツ配信システムに対して、プレイリスト情報を接続確立用メッセージ以外のメッセージに含ませるように構成されている点において相違している。従って、以下、かかる相違点を中心として説明する。

[0153] この第１変形例に係るサービス制御機能部４０は、ユーザ端末２により送信されたコンテンツ送信要求を受信すると、第１実施形態と相違して、プレイリスト情報を生成しない。そして、サービス制御機能部４０は、図１２に示したように、プレイリスト情報を含まないコンテンツ送信指示をコアＩＭＳ部３０を介してメディア機能部６０へ送信する（ステップＣ１１０１）。

[0154] そして、メディア機能部６０は、コンテンツ送信指示を受信すると、第１実施形態に係るステップＤ５０１と同様に、送信許可通知をコアＩＭＳ部３０を介してサービス制御機能部４０へ送信する（ステップＤ１１０１）。送信許可通知は、ＳＩＰメッセージのうちのＯＫメッセージとして送信される。

[0155] そして、サービス制御機能部４０は、送信許可通知を受信すると、第１実施形態に係るステップＣ５０１と同様に、プレイリスト情報を生成する（ステップＣ１１０２）。次いで、サービス制御機能部４０は、生成したプレイリスト情報を含むプレイリスト通知を、コアＩＭＳ部３０を介してメディア機能部６０へ送信する（ステップＣ１１０３）。プレイリスト通知は、ＳＩＰメッセージのうちのＩＮＦＯメッセージ（メソッドとして「ＩＮＦＯ」が設定されたメッセージ）として送信される。なお、プレイリスト通知は、ＳＩＰメッセージのうちのＭＥＳＳＡＧＥメッセージ（メソッドとして「ＭＥＳＳＡＧＥ」が設定されたメッセージ）として送信されてもよい。

[0156] これにより、メディア機能部６０は、プレイリスト通知を受信する。そして、メディア機能部６０は、プレイリスト受信完了通知をコアＩＭＳ部３０を介してサービス制御機能部４０へ送信する（ステップＤ１１０２）。プレイリスト受信完了通知は、プレイリスト情報を含み、プレイリスト通知を受信した旨を表す情報である。プレイリスト受信完了通知は、ＳＩＰメッセージのうちのＯＫメッセージとして送信される。

[0157] そして、サービス制御機能部４０は、プレイリスト受信完了通知を受信すると、第１実施形態に係るステップＣ５０３と同様に、プレイリスト情報をコアＩＭＳ部３０を介してユーザ端末２へ送信する。更に、コンテンツ配信システム１は、第１実施形態に係るステップＣ５０３以降の処理と同様の処理を実行することにより、ユーザ端末２とメディアサーバ４ｂとの間の接続を確立するとともに、メディアサーバ４ｂからユーザ端末２へコンテンツデータを送信する。

この第１変形例によっても、上記第１実施形態と同様の作用及び効果を奏することができる。

[0158] ＜第１実施形態の第２変形例＞

次に、本発明の第１実施形態の第２変形例に係るコンテンツ配信システムについて説明する。この第２変形例に係るコンテンツ配信システムは、上記第１実施形態に係るコンテンツ配信システムに対して、プレイリスト情報を接続確立用メッセージ以外のメッセージに含ませるように構成されている点において相違している。従って、以下、かかる相違点を中心として説明する。

[0159] この第２変形例に係るサービス制御機能部４０は、ユーザ端末２により送信されたコンテンツ送信要求を受信すると、第１実施形態と相違して、プレイリスト情報を生成しない。そして、サービス制御機能部４０は、図１３に示したように、プレイリスト情報を含まないコンテンツ送信指示をコアＩＭＳ部３０を介してメディア機能部６０へ送信する（ステップＣ１２０１）。

[0160] そして、メディア機能部６０は、コンテンツ送信指示を受信すると、第１

実施形態に係るステップＤ５０１と同様に、送信許可通知をコアＩＭＳ部３０を介してサービス制御機能部４０へ送信する（ステップＤ１２０１）。送信許可通知は、ＳＩＰメッセージのうちのＯＫメッセージとして送信される。

[0161] 更に、メディア機能部６０は、プレイリスト送信要求をコアＩＭＳ部３０を介してサービス制御機能部４０へ送信する（ステップＤ１２０２）。プレイリスト送信要求は、受信したコンテンツ送信指示に含まれるユーザ識別情報、端末アドレス情報及びメインコンテンツ識別情報を含み、且つ、プレイリスト情報の送信を要求する旨を表す情報である。プレイリスト送信要求は、ＳＩＰメッセージのうちのＩＮＦＯメッセージとして送信される。なお、プレイリスト送信要求は、ＳＩＰメッセージのうちのＭＥＳＳＡＧＥメッセージとして送信されてもよい。

[0162] そして、サービス制御機能部４０は、プレイリスト送信要求を受信すると、第１実施形態に係るステップＣ５０１と同様に、プレイリスト情報を生成する（ステップＣ１２０２）。次いで、サービス制御機能部４０は、生成したプレイリスト情報を含むプレイリスト通知を、コアＩＭＳ部３０を介してメディア機能部６０へ送信する（ステップＣ１２０３）。プレイリスト通知は、ＳＩＰメッセージのうちのＯＫメッセージとして送信される。

[0163] これにより、メディア機能部６０は、プレイリスト通知を受信する。そして、メディア機能部６０は、プレイリスト受信完了通知をコアＩＭＳ部３０を介してサービス制御機能部４０へ送信する（ステップＤ１２０３）。プレイリスト受信完了通知は、プレイリスト情報を含み、プレイリスト通知を受信した旨を表す情報である。プレイリスト受信完了通知は、ＳＩＰメッセージのうちのＯＫメッセージとして送信される。

[0164] そして、サービス制御機能部４０は、プレイリスト受信完了通知を受信すると、第１実施形態に係るステップＣ５０３と同様に、プレイリスト情報をコアＩＭＳ部３０を介してユーザ端末２へ送信する。更に、コンテンツ配信システム１は、第１実施形態に係るステップＣ５０３以降の処理と同様の処

理を実行することにより、ユーザ端末２とメディアサーバ４ｂとの間の接続を確立するとともに、メディアサーバ４ｂからユーザ端末２へコンテンツデータを送信する。

この第２変形例によっても、上記第１実施形態と同様の作用及び効果を奏することができる。

[0165] ＜第２実施形態＞

次に、本発明の第２実施形態に係るコンテンツ配信システムについて説明する。第２実施形態に係るコンテンツ配信システムは、上記第１実施形態に係るコンテンツ配信システムに対して、サービス制御機能部４０からメディア機能部６０へ広告属性情報が送信されるとともに、メディア機能部６０がその広告属性情報に基づいてプレイリスト情報を生成する点において相違している。従って、以下、かかる相違点を中心として説明する。

[0166] この第２実施形態に係るサービス制御機能部４０は、図１４に示したように、広告属性情報記憶部４３、広告挿入情報記憶部４４及びプレイリスト生成部４５を含まない。サービス制御機能部４０は、広告選択用情報取得部４７を含む。

[0167] 広告選択用情報取得部４７は、情報送受信部４１により受信された処理要求としてのコンテンツ送信要求を受け付ける。広告選択用情報取得部４７は、ユーザ基礎情報記憶部５１に記憶されているユーザ基礎情報のうちの、情報送受信部４１により受信されたコンテンツ送信要求に含まれるユーザ識別情報と対応付けて記憶されているユーザ基礎情報を取得する。

[0168] 更に、広告選択用情報取得部４７は、コンテンツ基礎情報記憶部４２に記憶されているコンテンツ基礎情報のうちの、コンテンツ送信要求に含まれるメインコンテンツ識別情報と対応付けて記憶されているコンテンツ基礎情報を取得する。

[0169] 配信要求部４６は、コンテンツ送信指示を出力する。コンテンツ送信指示は、広告選択用情報取得部４７により取得されたユーザ基礎情報及びコンテンツ基礎情報を含む広告選択用情報と、コンテンツ送信要求に含まれるユー

ザ認証成功情報（即ち、ユーザ識別情報）、端末アドレス情報及びメインコンテンツ識別情報と、を含む。

情報送受信部（送信要求受信手段及び広告選択用情報送信手段）４１は、配信要求部４６により出力されたコンテンツ送信指示をコアＩＭＳ部３０を介してメディアサーバ４ｂへ送信する。

[0170] 一方、メディア機能部６０は、広告属性情報記憶部４３と同様の広告属性情報記憶部６６と、広告挿入情報記憶部４４と同様の広告挿入情報記憶部６７と、プレイリスト生成部４５と同様のプレイリスト生成部（広告コンテンツ選択手段）６８と、を含む。

[0171] プレイリスト生成部６８は、情報送受信部（広告選択用情報受信手段）６１により受信されたコンテンツ送信指示に含まれる広告選択用情報を取得する。そして、プレイリスト生成部６８は、取得した広告選択用情報に基づいて広告属性情報毎の最終優先度を算出する。次いで、プレイリスト生成部６８は、広告属性情報記憶部６６により記憶されている広告コンテンツ識別情報のうちの、上記算出した最終優先度が最大である広告属性情報と対応付けられた広告コンテンツ識別情報を抽出する。

[0172] 一方、プレイリスト生成部６８は、広告挿入情報記憶部６７に記憶されている挿入数情報及び挿入位置情報のうちの、コンテンツ送信指示に含まれるメインコンテンツ識別情報と対応付けて記憶されている挿入数情報及び挿入位置情報を取得する。

[0173] そして、プレイリスト生成部６８は、上記抽出した広告コンテンツ識別情報の中から、上記取得した挿入数情報が表す数だけ、広告コンテンツ識別情報を選択する。次いで、プレイリスト生成部６８は、選択した広告コンテンツ識別情報と、コンテンツ送信指示に含まれるメインコンテンツ識別情報と、上記取得した挿入位置情報と、に基づいてプレイリスト情報を生成する。

[0174] そして、情報送受信部６１は、プレイリスト生成部６８により生成されたプレイリスト情報を、サービス制御機能部４０及びコアＩＭＳ部３０を介してユーザ端末２へ送信する。

[0175] この第２実施形態に係るサービス制御機能部４０は、ユーザ端末２により送信されたコンテンツ送信要求を受信する（送信要求受信工程）と、第１実施形態と相違して、プレイリスト情報を生成しない。そして、サービス制御機能部４０は、図１５に示したように、プレイリスト情報に代えて広告選択用情報を含むコンテンツ送信指示をコアＩＭＳ部３０を介してメディア機能部６０へ送信する（ステップＣ１４０１、広告選択用情報送信工程）。

[0176] コンテンツ送信指示は、ＳＩＰメッセージのうちのＩＮＶＩＴＥメッセージとして送信される。図１５に示したように、ＩＮＶＩＴＥメッセージは、ヘッダ部ＨＤとボディ部ＢＤとを含む。本例では、広告選択用情報のうちのユーザ基礎情報ＵＩは、ＩＮＶＩＴＥメッセージのうちのヘッダ部ＨＤにてフィールド「Ｘ－ｕｓｅｒ－ｆａｖｏｒｉｔｅ」の値として含まれている。また、広告選択用情報のうちのコンテンツ基礎情報ＣＩは、ＩＮＶＩＴＥメッセージのうちのヘッダ部ＨＤにてフィールド「Ｘ－ｃｏｎｔｅｎｔ－ｆａｖｏｒｉｔｅ」の値として含まれている。

[0177] 本例では、ユーザ基礎情報ＵＩ及びコンテンツ基礎情報ＣＩのそれぞれは、「，」により区切られた要素情報を含む。各要素情報のうちの「；」により区切られた先頭側の部分は、広告属性情報を表す（例えば、「ｃａｒ」は「自動車」、「ｒｅａｌ　ｅｓｔａｔｅ」は「不動産」等）。また、各要素情報のうちの「；」により区切られた末尾側の部分は、優先度情報を表す。

[0178] このＩＮＶＩＴＥメッセージは、コアＩＭＳ部３０がユーザ端末２とメディア機能部６０との間の接続を確立するために、コアＩＭＳ部３０がユーザ端末２、サービス制御機能部４０及びメディア機能部６０のそれぞれとの間で授受する接続確立用メッセージの１つである。

[0179] 即ち、サービス制御機能部４０は、接続確立用メッセージに広告選択用情報を含ませることにより、広告選択用情報をコアＩＭＳ部３０を介してメディア機能部６０（メディアサーバ４ｂ）へ送信する、と言うことができる。

[0180] 換言すると、サービス制御機能部４０は、コアＩＭＳ部３０がユーザ端末２とメディア機能部６０との間の接続を確立するための処理を行う際に、広

告選択用情報をコアＩＭＳ部３０を介してメディアサーバ４ｂへ送信する、と言うことができる。

[0181] そして、メディア機能部６０は、サービス制御機能部４０により送信されたコンテンツ送信指示を受信する。次いで、メディア機能部６０は、受信したコンテンツ送信指示に含まれる広告選択用情報を取得する。

[0182] 次いで、メディア機能部６０は、取得した広告選択用情報と、広告属性情報記憶部６６により記憶されている広告コンテンツ識別情報と、広告挿入情報記憶部６７に記憶されている挿入数情報及び挿入位置情報と、に基づいて広告コンテンツ識別情報を選択する（広告コンテンツ選択工程）。更に、メディア機能部６０は、選択した広告コンテンツ識別情報と、コンテンツ送信指示に含まれるメインコンテンツ識別情報と、広告挿入情報記憶部６７に記憶されている挿入位置情報と、に基づいてプレイリスト情報を生成する（ステップＤ１４０１）。

[0183] 次いで、メディア機能部６０は、生成したプレイリスト情報を含む送信許可通知を、第１実施形態に係るステップＤ５０１と同様に、コアＩＭＳ部３０を介してサービス制御機能部４０へ送信する（ステップＤ５０１）。

[0184] そして、サービス制御機能部４０は、送信許可通知を受信すると、第１実施形態に係るステップＣ５０３と同様に、プレイリスト情報をコアＩＭＳ部３０を介してユーザ端末２へ送信する。更に、コンテンツ配信システム１は、第１実施形態に係るステップＣ５０３以降の処理と同様の処理を実行することにより、ユーザ端末２とメディアサーバ４ｂとの間の接続を確立するとともに、メディアサーバ４ｂからユーザ端末２へコンテンツデータを送信する。

[0185] 以上、説明したように、本発明によるコンテンツ配信システムの第２実施形態によれば、第１実施形態と同様に、コンテンツ配信システム１は、広告選択用情報に基づいて選択された広告コンテンツを特定する選択広告コンテンツ特定情報をユーザ端末２へ送信する。従って、広告選択用情報に応じた広告コンテンツが挿入された視聴用コンテンツをユーザに視聴させることが

できる。

[0186] 更に、上記第２実施形態によれば、ユーザ端末２によってメインコンテンツ及び広告コンテンツが出力される順序を、アプリケーションサーバシステム４に決定させることができる。これにより、広告コンテンツを提供する事業者の意図をより大きく反映した態様にて広告コンテンツをユーザに視聴させることができる。

[0187] 更に、上記第２実施形態において、広告選択用情報は、ユーザ識別情報と対応付けられたユーザ基礎情報を含む。これによれば、コンテンツ配信システム１は、コンテンツ送信要求を送信してきたユーザ端末２のユーザに応じた広告コンテンツが挿入された視聴用コンテンツをユーザに視聴させることができる。

[0188] 加えて、上記第２実施形態において、広告選択用情報は、メインコンテンツ識別情報と対応付けられたコンテンツ基礎情報を含む。これによれば、コンテンツ配信システム１は、受信されたコンテンツ送信要求に含まれるメインコンテンツ識別情報により識別されるメインコンテンツに応じた広告コンテンツが挿入された視聴用コンテンツをユーザに視聴させることができる。

[0189] 更に、上記第２実施形態において、サービス制御機能部４０は、接続制御システム３が接続を確立するための処理を行う際に、広告選択用情報を接続制御システム３を介してメディアサーバ４ｂへ送信するように構成されている。これによれば、サービス制御サーバ４ａは、接続制御システム３が接続を確立するための処理を行う時点における最新の広告選択用情報をメディアサーバ４ｂへ送信することができる。この結果、メディアサーバ４ｂが、その変更後の広告選択用情報に基づいて広告コンテンツデータを選択することができる。

[0190] 加えて、上記第２実施形態において、サービス制御機能部４０は、広告選択用情報を接続確立用メッセージに含ませることにより、広告選択用情報を接続制御システム３を介してメディアサーバ４ｂへ送信するように構成されている。

[0191] これによれば、サービス制御サーバ４ａが広告選択用情報をメディアサーバ４ｂへ送信するために、接続確立用メッセージ以外のメッセージを別途送信する必要がない。即ち、接続制御システム３、サービス制御サーバ４ａ及びメディアサーバ４ｂの間の通信回数を減らすことができる。換言すると、接続制御システム３、サービス制御サーバ４ａ及びメディアサーバ４ｂがメッセージを授受するための処理負荷、及び／又は、通信負荷を軽減することができる。

[0192] ＜第３実施形態＞

次に、本発明の第３実施形態に係るコンテンツ配信システムについて説明する。第３実施形態に係るコンテンツ配信システムは、上記第１実施形態に係るコンテンツ配信システムに対して、サービス制御機能部４０からメディア機能部６０へ選択広告コンテンツ特定情報が送信されるとともに、メディア機能部６０がその選択広告コンテンツ特定情報に基づいてプレイリスト情報を生成する点において相違している。従って、以下、かかる相違点を中心として説明する。

[0193] この第３実施形態に係るサービス制御機能部４０は、図１６に示したように、広告挿入情報記憶部４４及びプレイリスト生成部４５を含まない。サービス制御機能部４０は、広告コンテンツ選択部（広告コンテンツ選択手段）４８を含む。

[0194] 第３実施形態に係るコンテンツ基礎情報記憶部４２は、メインコンテンツを識別するためのメインコンテンツ識別情報と対応付けて、コンテンツ基礎情報及び挿入数情報を記憶している。

[0195] 広告コンテンツ選択部４８は、情報送受信部４１により受信された処理要求としてのコンテンツ送信要求を受け付ける。広告コンテンツ選択部４８は、ユーザ基礎情報記憶部５１に記憶されているユーザ基礎情報のうちの、情報送受信部４１により受信されたコンテンツ送信要求に含まれるユーザ識別情報と対応付けて記憶されているユーザ基礎情報を取得する。

[0196] 更に、広告コンテンツ選択部４８は、コンテンツ基礎情報記憶部４２に記

憶されているコンテンツ基礎情報のうちの、コンテンツ送信要求に含まれるメインコンテンツ識別情報と対応付けて記憶されているコンテンツ基礎情報を取得する。

[0197] そして、広告コンテンツ選択部４８は、上記取得したユーザ基礎情報と、上記取得したコンテンツ基礎情報と、に基づいて広告属性情報毎の最終優先度を算出する。次いで、広告コンテンツ選択部４８は、広告属性情報記憶部４３により記憶されている広告コンテンツ識別情報のうちの、上記算出した最終優先度が最大である広告属性情報と対応付けられた広告コンテンツ識別情報を抽出する。

[0198] 一方、広告コンテンツ選択部４８は、コンテンツ基礎情報記憶部４２に記憶されている挿入数情報のうちの、コンテンツ送信要求に含まれるメインコンテンツ識別情報と対応付けて記憶されている挿入数情報を取得する。そして、広告コンテンツ選択部４８は、上記抽出した広告コンテンツ識別情報の中から、上記取得した挿入数情報が表す数だけ、広告コンテンツ識別情報を選択する。

[0199] 配信要求部４６は、コンテンツ送信指示を出力する。コンテンツ送信指示は、広告コンテンツ選択部４８により選択された広告コンテンツ識別情報を含む選択広告コンテンツ特定情報と、コンテンツ送信要求に含まれるユーザ認証成功情報（即ち、ユーザ識別情報）、端末アドレス情報及びメインコンテンツ識別情報と、を含む。

情報送受信部（送信要求受信手段及び選択広告コンテンツ特定情報送信手段）４１は、配信要求部４６により出力されたコンテンツ送信指示をコアＩＭＳ部３０を介してメディアサーバ４ｂへ送信する。

[0200] 一方、メディア機能部６０は、広告挿入情報記憶部４４と同様の広告挿入情報記憶部６７と、プレイリスト生成部４５と同様のプレイリスト生成部６８と、を含む。

[0201] プレイリスト生成部６８は、情報送受信部６１により受信されたコンテンツ送信指示に含まれる選択広告コンテンツ特定情報を取得する。

一方、プレイリスト生成部６８は、広告挿入情報記憶部６７に記憶されている挿入位置情報のうちの、コンテンツ送信指示に含まれるメインコンテンツ識別情報と対応付けて記憶されている挿入位置情報を取得する。

[0202] そして、プレイリスト生成部６８は、上記取得した選択広告コンテンツ特定情報に含まれる広告コンテンツ識別情報と、コンテンツ送信指示に含まれるメインコンテンツ識別情報と、上記取得した挿入位置情報と、に基づいてプレイリスト情報を生成する。

[0203] そして、情報送受信部６１は、プレイリスト生成部６８により生成されたプレイリスト情報を、サービス制御機能部４０及びコアＩＭＳ部３０を介してユーザ端末２へ送信する。

[0204] この第３実施形態に係るサービス制御機能部４０は、ユーザ端末２により送信されたコンテンツ送信要求を受信する（送信要求受信工程）と、第１実施形態と相違して、プレイリスト情報を生成しない。そして、サービス制御機能部４０は、図１８に示したように、プレイリスト情報に代えて選択広告コンテンツ特定情報を含むコンテンツ送信指示をコアＩＭＳ部３０を介してメディア機能部６０へ送信する（ステップＣ１７０１）。

[0205] コンテンツ送信指示は、ＳＩＰメッセージのうちのＩＮＶＩＴＥメッセージとして送信される。図１９に示したように、ＩＮＶＩＴＥメッセージは、ヘッダ部ＨＤとボディ部ＢＤとを含む。本例では、選択広告コンテンツ特定情報ＡＤは、ＩＮＶＩＴＥメッセージのうちのヘッダ部ＨＤにてフィールド「Ｘ－ｖｉｄｅｏ－ａｄｖｅｒｔｉｓｅｍｅｎｔ」の値として含まれている。本例では、選択広告コンテンツ特定情報ＡＤは、「，」により区切られた広告コンテンツ識別情報を含む。

[0206] このＩＮＶＩＴＥメッセージは、コアＩＭＳ部３０がユーザ端末２とメディア機能部６０との間の接続を確立するために、コアＩＭＳ部３０がユーザ端末２、サービス制御機能部４０及びメディア機能部６０のそれぞれとの間で授受する接続確立用メッセージの１つである。

[0207] 即ち、サービス制御機能部４０は、接続確立用メッセージに選択広告コン

テンツ特定情報を含ませることにより、選択広告コンテンツ特定情報をコアＩＭＳ部３０を介してメディア機能部６０（メディアサーバ４ｂ）へ送信する、と言うことができる。

[0208] 換言すると、サービス制御機能部４０は、コアＩＭＳ部３０がユーザ端末２とメディア機能部６０との間の接続を確立するための処理を行う際に、選択広告コンテンツ特定情報を含むプレイリスト情報をコアＩＭＳ部３０を介してメディアサーバ４ｂへ送信する、と言うことができる。

[0209] そして、メディア機能部６０は、コンテンツ送信指示を受信すると、受信したコンテンツ送信指示に含まれる選択広告コンテンツ特定情報を取得する。次いで、メディア機能部６０は、取得した選択広告コンテンツ特定情報に含まれる広告コンテンツ識別情報と、広告挿入情報記憶部６７に記憶されている挿入位置情報と、コンテンツ送信指示に含まれるメインコンテンツ識別情報と、に基づいてプレイリスト情報を生成する（ステップＤ１７０１）。

[0210] 次いで、メディア機能部６０は、生成したプレイリスト情報を含む送信許可通知を、第１実施形態に係るステップＤ５０１と同様に、コアＩＭＳ部３０を介してサービス制御機能部４０へ送信する（ステップＤ５０１）。

[0211] そして、サービス制御機能部４０は、送信許可通知を受信すると、第１実施形態に係るステップＣ５０３と同様に、プレイリスト情報をコアＩＭＳ部３０を介してユーザ端末２へ送信する（選択広告コンテンツ特定情報送信工程）。更に、コンテンツ配信システム１は、第１実施形態に係るステップＣ５０３以降の処理と同様の処理を実行することにより、ユーザ端末２とメディアサーバ４ｂとの間の接続を確立するとともに、メディアサーバ４ｂからユーザ端末２へコンテンツデータを送信する。

[0212] この第３実施形態によっても、上記第２実施形態と同様の作用及び効果を奏することができる。

[0213] ＜第４実施形態＞

次に、本発明の第４実施形態に係るコンテンツ配信システムについて図２０を参照しながら説明する。

第４実施形態に係るコンテンツ配信システム１は、アプリケーションサーバシステムと接続制御システムとを含む。接続制御システムは、ユーザ端末により送信された端末特定情報を受信し当該受信した端末特定情報に基づいて上記アプリケーションサーバシステムと当該ユーザ端末との間の接続を確立するように構成される。

[0214] 更に、コンテンツ配信システム１は、コンテンツ記憶部（コンテンツ記憶手段）ＲＣと、送信要求受信部（送信要求受信手段）１０１と、広告コンテンツ選択部（広告コンテンツ選択手段）１０２と、選択広告コンテンツ特定情報送信部（選択広告コンテンツ特定情報送信手段）１０３と、を含む。

[0215] コンテンツ記憶部ＲＣは、広告コンテンツを表す広告コンテンツデータ、及び、メインコンテンツを表すメインコンテンツデータ、を記憶する。

送信要求受信部１０１は、メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つユーザ端末２により送信されたコンテンツ送信要求を、接続制御システム３を介して受信する。

[0216] 広告コンテンツ選択部１０２は、広告コンテンツの属性を表す広告属性情報を含む広告選択用情報に基づいて、コンテンツ記憶部ＲＣにより記憶されている広告コンテンツデータを選択する。

選択広告コンテンツ特定情報送信部１０３は、広告コンテンツ選択部１０２により選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、コンテンツ送信要求を送信してきたユーザ端末２へ、接続制御システム３を介して送信する。

[0217] これによれば、コンテンツ配信システム１は、広告選択用情報に基づいて選択された広告コンテンツを特定する選択広告コンテンツ特定情報をユーザ端末２へ送信する。従って、例えば、選択広告コンテンツ特定情報により特定される広告コンテンツが挿入された視聴用コンテンツを出力するようにユーザ端末２を構成し、且つ、メインコンテンツ（視聴希望コンテンツ）及び／又はユーザに応じて広告コンテンツを選択するようにアプリケーションサーバシステム４システムを構成することにより、メインコンテンツ及び／又

はユーザに応じた広告コンテンツが挿入された視聴用コンテンツをユーザ端末２のユーザに視聴させることができる。

[0218] この場合、上記ユーザ端末は、

上記アプリケーションサーバシステムにより送信された上記選択広告コンテンツ特定情報を受信する選択広告コンテンツ特定情報受信手段と、

上記アプリケーションサーバシステムとの間の接続が上記接続制御システムにより確立されている場合に、上記メインコンテンツ識別情報を含むメインコンテンツ視聴要求と、上記受信した選択広告コンテンツ特定情報を含む広告コンテンツ視聴要求と、を当該アプリケーションサーバシステムへ送信するコンテンツ視聴要求送信手段と、

を備え、

上記アプリケーションサーバシステムは、上記ユーザ端末により送信された上記メインコンテンツ視聴要求を受信し、当該受信したメインコンテンツ視聴要求に含まれるメインコンテンツ識別情報により識別されるメインコンテンツデータを当該ユーザ端末へ送信するとともに、当該ユーザ端末により送信された上記広告コンテンツ視聴要求を受信し、当該受信した広告コンテンツ視聴要求に含まれる選択広告コンテンツ特定情報により特定される広告コンテンツデータを当該ユーザ端末へ送信するコンテンツ送信手段を備えることが好適である。

[0219] この場合、上記ユーザ端末は、上記アプリケーションサーバシステムにより送信されたメインコンテンツデータ及び広告コンテンツデータを受信し、当該受信したメインコンテンツデータ及び広告コンテンツデータに基づいて、当該メインコンテンツデータが表すメインコンテンツに当該広告コンテンツデータが表す広告コンテンツを挿入した視聴用コンテンツを出力するコンテンツ出力手段を備えることが好適である。

[0220] これによれば、例えば、メインコンテンツ（視聴希望コンテンツ）及び／又はユーザに応じて広告コンテンツを選択するようにアプリケーションサーバシステムを構成することにより、メインコンテンツ及び／又はユーザに応

じた広告コンテンツが挿入された視聴用コンテンツをユーザに視聴させることができる。

[0221] この場合、上記選択広告コンテンツ特定情報送信手段は、上記コンテンツ送信要求に含まれる上記メインコンテンツ識別情報と、上記選択広告コンテンツ特定情報と、を含む情報であって、当該メインコンテンツ識別情報により識別されるメインコンテンツ及び当該選択広告コンテンツ特定情報により特定される広告コンテンツが出力される順序を表す情報を含む情報であるプレイリスト情報を、上記接続制御システムを介して、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ送信するように構成され、

上記選択広告コンテンツ特定情報受信手段は、上記アプリケーションサーバシステムにより送信された上記プレイリスト情報を受信するように構成され、

上記コンテンツ視聴要求送信手段は、上記受信されたプレイリスト情報に基づいて、上記メインコンテンツ視聴要求及び上記広告コンテンツ視聴要求を上記アプリケーションサーバシステムへ送信するように構成されることが好適である。

[0222] これによれば、ユーザ端末によってメインコンテンツ及び広告コンテンツが出力される順序を、アプリケーションサーバシステムに決定させることができる。これにより、広告コンテンツを提供する事業者の意図をより大きく反映した態様にて広告コンテンツをユーザに視聴させることができる。

[0223] この場合、上記コンテンツ記憶手段は、上記広告コンテンツデータと、当該広告コンテンツデータが表す広告コンテンツの属性を表す広告属性情報と、を対応付けて記憶するように構成され、

上記広告選択用情報は、上記広告属性情報を特定するための情報であって上記ユーザ端末のユーザを識別するためのユーザ識別情報と対応付けられた情報であるユーザ基礎情報を含み、

上記広告コンテンツ選択手段は、上記コンテンツ送信要求を送信してきたユーザ端末のユーザを識別するためのユーザ識別情報と対応付けられたユー

ザ基礎情報により特定される広告属性情報と対応付けて記憶されている広告コンテンツデータを選択するように構成されることが好適である。

[0224] これによれば、コンテンツ配信システムは、コンテンツ送信要求を送信してきたユーザ端末のユーザに応じた広告コンテンツが挿入された視聴用コンテンツをユーザに視聴させることができる。

[0225] この場合、上記コンテンツ記憶手段は、上記広告コンテンツデータと、当該広告コンテンツデータが表す広告コンテンツの属性を表す広告属性情報と、を対応付けて記憶するように構成され、

上記広告選択用情報は、上記広告属性情報を特定するための情報であって上記メインコンテンツを識別するメインコンテンツ識別情報と対応付けられた情報であるコンテンツ基礎情報を含み、

上記広告コンテンツ選択手段は、上記受信されたコンテンツ送信要求に含まれるメインコンテンツ識別情報と対応付けられたコンテンツ基礎情報により特定される広告属性情報と対応付けて記憶されている広告コンテンツデータを選択するように構成されることが好適である。

[0226] これによれば、コンテンツ配信システムは、受信されたコンテンツ送信要求に含まれるメインコンテンツ識別情報により識別されるメインコンテンツに応じた広告コンテンツが挿入された視聴用コンテンツをユーザに視聴させることができる。

[0227] この場合、上記選択広告コンテンツ特定情報送信手段は、上記接続制御システムが上記接続を確立するための処理を行う際に、上記選択広告コンテンツ特定情報を当該接続制御システムを介して上記ユーザ端末へ送信するように構成されることが好適である。

[0228] ところで、接続制御システムが接続を確立するための処理を行う前に、選択広告コンテンツ特定情報をユーザ端末へ送信するように、アプリケーションサーバシステムが構成されている場合であって、選択広告コンテンツ特定情報の送信後に広告選択用情報が変更された場合には、その変更後の広告選択用情報を、ユーザ端末が受信した選択広告コンテンツ特定情報に反映する

ことができない。

[0229] これに対し、上記構成によれば、アプリケーションサーバシステムは、接続制御システムが接続を確立するための処理を行う時点における最新の広告選択用情報を反映した選択広告コンテンツ特定情報をユーザ端末へ送信することができる。

[0230] この場合、上記接続制御システムは、上記ユーザ端末及び上記アプリケーションサーバシステムのそれぞれとの間で所定の接続確立用メッセージを授受することにより上記接続を確立するように構成され、

上記選択広告コンテンツ特定情報送信手段は、上記接続確立用メッセージに上記選択広告コンテンツ特定情報を含ませることにより、当該選択広告コンテンツ特定情報を当該接続制御システムを介して上記ユーザ端末へ送信するように構成されることが好適である。

[0231] これによれば、アプリケーションサーバシステムが選択広告コンテンツ特定情報をユーザ端末へ送信するために、接続確立用メッセージ以外のメッセージを別途送信する必要がない。即ち、接続制御システム、アプリケーションサーバシステム及びユーザ端末の間の通信回数を減らすことができる。換言すると、接続制御システム、アプリケーションサーバシステム及びユーザ端末がメッセージを授受するための処理負荷、及び／又は、通信負荷を軽減することができる。

[0232] この場合、上記アプリケーションサーバシステムは、サービス制御サーバとメディアサーバとを含み、

上記サービス制御サーバは、上記送信要求受信手段、上記広告コンテンツ選択手段及び上記選択広告コンテンツ特定情報送信手段を備え、

上記メディアサーバは、上記コンテンツ記憶手段を備えることが好適である。

[0233] また、上記コンテンツ配信システムの他の態様において、

上記アプリケーションサーバシステムは、サービス制御サーバとメディアサーバとを含み、

上記サービス制御サーバは、上記送信要求受信手段を備え、

上記メディアサーバは、上記コンテンツ記憶手段、上記広告コンテンツ選択手段及び上記選択広告コンテンツ特定情報送信手段を備え、

上記サービス制御サーバは、上記広告選択用情報を、上記接続制御システムを介して上記メディアサーバへ送信する広告選択用情報送信手段を備え、

上記メディアサーバは、上記サービス制御サーバにより送信された上記広告選択用情報を受信する広告選択用情報受信手段を備え、

上記広告コンテンツ選択手段は、上記受信された広告選択用情報に基づいて、上記広告コンテンツデータを選択するように構成されることが好適である。

[0234] また、本発明の他の形態であるコンテンツ配信システムは、

アプリケーションサーバシステムと接続制御システムとを含み、

上記接続制御システムは、ユーザ端末（Ｕｓｅｒ　Ｅｑｕｉｐｍｅｎｔ）により送信された端末特定情報を受信し当該受信した端末特定情報に基づいて上記アプリケーションサーバシステムと当該ユーザ端末との間の接続を確立するコアＩＭＳ部（Ｃｏｒｅ　ＩＭＳ（Ｉｎｔｅｒｎｅｔ　Ｐｒｏｔｏｃｏｌ　Ｍｕｌｔｉｍｅｄｉａ　Ｓｕｂｓｙｓｔｅｍ））を備え、

上記アプリケーションサーバシステムは、

上記コアＩＭＳ部により接続が確立された上記ユーザ端末へ、コンテンツを表すコンテンツデータを送信するメディア機能部（Ｍｅｄｉａ　Ｆｕｎｃｔｉｏｎｓ）と、

上記メディア機能部により提供されるサービスを制御するサービス制御機能部（Ｓｅｒｖｉｃｅ　Ｃｏｎｔｒｏｌ　Ｆｕｎｃｔｉｏｎｓ）と、

上記ユーザ端末のユーザのプロファイル情報を記憶するユーザプロファイルサーバ機能部（Ｕｓｅｒ　Ｐｒｏｆｉｌｅ　Ｓｅｒｖｅｒ　Ｆｕｎｃｔｉｏｎｓ）と、を備え、

上記メディア機能部は、

広告コンテンツを表す広告コンテンツデータ、及び、メインコンテンツを

表すメインコンテンツデータ、を記憶するコンテンツ記憶手段を備え、

上記サービス制御機能部は、

上記メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つ上記ユーザ端末により送信されたコンテンツ送信要求を、上記コアＩＭＳ部を介して受信する送信要求受信手段と、

上記広告コンテンツの属性を表す広告属性情報を含み、且つ、上記ユーザプロファイルサーバ機能部、上記サービス制御機能部又は上記接続制御システムにより予め記憶された広告選択用情報に基づいて、上記記憶されている広告コンテンツデータを選択する広告コンテンツ選択手段と、

上記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ、上記コアＩＭＳ部を介して送信する選択広告コンテンツ特定情報送信手段と、

を備える。

[0235] この場合、上記ユーザ端末は、

上記サービス制御機能部により送信された上記選択広告コンテンツ特定情報を受信する選択広告コンテンツ特定情報受信手段と、

上記メディア機能部との間の接続が上記コアＩＭＳ部により確立されている場合に、上記メインコンテンツ識別情報を含むメインコンテンツ視聴要求と、上記受信した選択広告コンテンツ特定情報を含む広告コンテンツ視聴要求と、を当該メディア機能部へ送信するコンテンツ視聴要求送信手段と、

を備え、

上記メディア機能部は、上記ユーザ端末により送信された上記メインコンテンツ視聴要求を受信し、当該受信したメインコンテンツ視聴要求に含まれるメインコンテンツ識別情報により識別されるメインコンテンツデータを当該ユーザ端末へ送信するとともに、当該ユーザ端末により送信された上記広告コンテンツ視聴要求を受信し、当該受信した広告コンテンツ視聴要求に含まれる選択広告コンテンツ特定情報により特定される広告コンテンツデータを当該ユーザ端末へ送信するコンテンツ送信手段を備えることが好適である

。

[0236] この場合、上記ユーザ端末は、上記メディア機能部により送信されたメインコンテンツデータ及び広告コンテンツデータを受信し、当該受信したメインコンテンツデータ及び広告コンテンツデータに基づいて、当該メインコンテンツデータが表すメインコンテンツに当該広告コンテンツデータが表す広告コンテンツを挿入した視聴用コンテンツを出力するコンテンツ出力手段を備えることが好適である。

[0237] この場合、上記選択広告コンテンツ特定情報送信手段は、上記コンテンツ送信要求に含まれる上記メインコンテンツ識別情報と、上記選択広告コンテンツ特定情報と、を含む情報であって、当該メインコンテンツ識別情報により識別されるメインコンテンツ及び当該選択広告コンテンツ特定情報により特定される広告コンテンツが出力される順序を表す情報を含む情報であるプレイリスト情報を、上記コアＩＭＳ部を介して、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ送信するように構成され、

上記選択広告コンテンツ特定情報受信手段は、上記サービス制御機能部により送信された上記プレイリスト情報を受信するように構成され、

上記コンテンツ視聴要求送信手段は、上記受信されたプレイリスト情報に基づいて、上記メインコンテンツ視聴要求及び上記広告コンテンツ視聴要求を上記メディア機能部へ送信するように構成されることが好適である。

[0238] また、本発明の他の形態であるコンテンツ配信方法は、

接続制御システムが、ユーザ端末により送信された端末特定情報を受信し当該受信した端末特定情報に基づいてアプリケーションサーバシステムと当該ユーザ端末との間の接続を確立し、

上記アプリケーションサーバシステムが、メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つ上記ユーザ端末により送信されたコンテンツ送信要求を、上記接続制御システムを介して受信し、

広告コンテンツを表す広告コンテンツデータ、及び、メインコンテンツを表すメインコンテンツデータ、を記憶する記憶装置に記憶されている広告コ

ンテンツデータを、広告コンテンツの属性を表す広告属性情報を含む広告選択用情報に基づいて選択し、

上記アプリケーションサーバシステムが、上記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ、上記接続制御システムを介して送信する方法である。

[0239] この場合、上記コンテンツ配信方法は、

上記ユーザ端末が、上記アプリケーションサーバシステムにより送信された上記選択広告コンテンツ特定情報を受信し、

上記ユーザ端末と上記アプリケーションサーバシステムとの間の接続が上記接続制御システムにより確立されている場合に、当該ユーザ端末が、上記メインコンテンツ識別情報を含むメインコンテンツ視聴要求と、上記受信した選択広告コンテンツ特定情報を含む広告コンテンツ視聴要求と、を当該アプリケーションサーバシステムへ送信し、

上記アプリケーションサーバシステムが、上記ユーザ端末により送信された上記メインコンテンツ視聴要求を受信し、当該受信したメインコンテンツ視聴要求に含まれるメインコンテンツ識別情報により識別されるメインコンテンツデータを当該ユーザ端末へ送信するとともに、当該ユーザ端末により送信された上記広告コンテンツ視聴要求を受信し、当該受信した広告コンテンツ視聴要求に含まれる選択広告コンテンツ特定情報により特定される広告コンテンツデータを当該ユーザ端末へ送信することが好適である。

[0240] この場合、上記コンテンツ配信方法は、

上記ユーザ端末が、上記アプリケーションサーバシステムにより送信されたメインコンテンツデータ及び広告コンテンツデータを受信し、当該受信したメインコンテンツデータ及び広告コンテンツデータに基づいて、当該メインコンテンツデータが表すメインコンテンツに当該広告コンテンツデータが表す広告コンテンツを挿入した視聴用コンテンツを出力することが好適である。

[0241] この場合、上記コンテンツ配信方法は、

上記アプリケーションサーバシステムが、上記コンテンツ送信要求に含まれる上記メインコンテンツ識別情報と、上記選択広告コンテンツ特定情報と、を含む情報であって、当該メインコンテンツ識別情報により識別されるメインコンテンツ及び当該選択広告コンテンツ特定情報により特定される広告コンテンツが出力される順序を表す情報を含む情報であるプレイリスト情報を、上記接続制御システムを介して、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ送信し、

上記ユーザ端末が、上記アプリケーションサーバシステムにより送信された上記プレイリスト情報を受信し、

上記ユーザ端末が、上記受信されたプレイリスト情報に基づいて、上記メインコンテンツ視聴要求及び上記広告コンテンツ視聴要求を上記アプリケーションサーバシステムへ送信することが好適である。

[0242] また、本発明の他の形態であるプログラムは、

サービス制御サーバに、

メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つユーザ端末により送信されたコンテンツ送信要求を、メディアサーバと当該ユーザ端末との間の接続を確立する接続制御システムを介して受信する送信要求受信手段と、

広告コンテンツの属性を表す広告属性情報を含む広告選択用情報に基づいて、予め記憶装置に記憶されている広告コンテンツデータを選択する広告コンテンツ選択手段と、

上記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ、上記接続制御システムを介して送信する選択広告コンテンツ特定情報送信手段と、

を実現させるためのプログラムである。

[0243] この場合、上記選択広告コンテンツ特定情報送信手段は、上記コンテンツ送信要求に含まれる上記メインコンテンツ識別情報と、上記選択広告コンテ

ンツ特定情報と、を含む情報であって、当該メインコンテンツ識別情報により識別されるメインコンテンツ及び当該選択広告コンテンツ特定情報により特定される広告コンテンツが出力される順序を表す情報を含む情報であるプレイリスト情報を、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ、上記接続制御システムを介して送信するように構成されることが好適である。

[0244] また、本発明の他の形態であるプログラムは、

ユーザ端末に、

選択された広告コンテンツデータを特定する情報であって、アプリケーションサーバシステムにより送信された情報である選択広告コンテンツ特定情報を、当該アプリケーションサーバシステムと当該ユーザ端末との間の接続を確立する接続制御システムを介して受信する選択広告コンテンツ特定情報受信手段と、

上記アプリケーションサーバシステムとの間の接続が上記接続制御システムにより確立されている場合に、メインコンテンツを識別するためのメインコンテンツ識別情報を含むメインコンテンツ視聴要求と、上記受信した選択広告コンテンツ特定情報を含む広告コンテンツ視聴要求と、を当該アプリケーションサーバシステムへ送信するコンテンツ視聴要求送信手段と、

を実現させるためのプログラムである。

[0245] この場合、上記プログラムは、

上記ユーザ端末に、更に、

上記アプリケーションサーバシステムにより送信されたメインコンテンツデータ及び広告コンテンツデータを受信し、当該受信したメインコンテンツデータ及び広告コンテンツデータに基づいて、当該メインコンテンツデータが表すメインコンテンツに当該広告コンテンツデータが表す広告コンテンツを挿入した視聴用コンテンツを出力するコンテンツ出力手段を実現させるためのプログラムであることが好適である。

[0246] この場合、上記選択広告コンテンツ特定情報受信手段は、上記メインコン

テンツ識別情報と、上記選択広告コンテンツ特定情報と、を含む情報であって、当該メインコンテンツ識別情報により識別されるメインコンテンツ及び当該選択広告コンテンツ特定情報により特定される広告コンテンツが出力される順序を表す情報を含む情報であって、上記アプリケーションサーバシステムにより送信された情報であるプレイリスト情報を受信するように構成され、

上記コンテンツ視聴要求送信手段は、上記受信されたプレイリスト情報に基づいて、上記メインコンテンツ視聴要求及び上記広告コンテンツ視聴要求を上記アプリケーションサーバシステムへ送信するように構成されることが好適である。

[0247] 上述した構成を有する、コンテンツ配信方法、又は、プログラム、の発明であっても、上記コンテンツ配信システムと同様の作用を有するために、上述した本発明の目的を達成することができる。

[0248] 以上、上記各実施形態を参照して本願発明を説明したが、本願発明は、上述した実施形態に限定されるものではない。本願発明の構成及び詳細に、本願発明の範囲内において当業者が理解し得る様々な変更をすることができる。例えば、上記各実施形態の他の変形例として、上述した実施形態及び変形例の任意の組み合わせが採用されてもよい。

[0249] また、上記各実施形態において、広告選択用情報は、ユーザ基礎情報及びコンテンツ基礎情報の両方を含んでいたが、ユーザ基礎情報及びコンテンツ基礎情報の一方のみを含んでいてもよい。

[0250] また、上記各実施形態は、ユーザプロファイルサーバ機能部５０がユーザ基礎情報記憶部５１を含むように構成されていたが、ユーザプロファイルサーバ機能部５０に代えてサービス制御機能部４０がユーザ基礎情報記憶部５１を含むように構成されていてもよい。即ち、サービス制御機能部４０が、ユーザ識別情報と対応付けてユーザ基礎情報を記憶していてもよい。

[0251] また、上記各実施形態において、広告選択用情報は、ユーザ基礎情報及びコンテンツ基礎情報を含んでいたが、ユーザ基礎情報及び／又はコンテンツ

基礎情報に代えて、又は、ユーザ基礎情報及びコンテンツ基礎情報に加えて、ユーザ端末２の位置を表す端末位置情報、コンテンツ送信要求が送信された日時（曜日を含んでもよい）を表す送信日時情報、及び／又は、コンテンツ送信要求を送信したユーザの属性（例えば、ユーザの居住地、年齢、性別、身長、体重、及び／又は、職業等）を表すユーザ属性情報等を含んでいてもよい。更に、この場合、コンテンツ配信システム１は、コアＩＭＳ部３０が記憶している端末位置情報をメディア機能部６０へ送信するように構成されていてもよい。

[0252] また、上記各実施形態において、プレイリスト情報に含まれるコンテンツ要素情報は、コンテンツ識別情報と、そのコンテンツ識別情報により識別されるコンテンツの再生開始位置及び再生終了位置と、の組からなっていたが、コンテンツ識別情報のみからなっていてもよい。この場合、コンテンツデータ記憶部６２により記憶されるコンテンツデータは、広告コンテンツが挿入される位置にて１つのメインコンテンツを分割することにより生成されたコンテンツのそれぞれを表すデータであることが好適である。

[0253] また、上記各実施形態において、最終優先度は、ユーザ基礎情報に含まれる優先度情報が表す優先度と、コンテンツ基礎情報に含まれる優先度情報が表す優先度と、を合算することにより算出される。ところで、最終優先度は、ユーザ基礎情報に含まれる優先度情報が表す優先度に第１の係数を乗じた値と、コンテンツ基礎情報に含まれる優先度情報が表す優先度に第２の係数を乗じた値と、を合算することにより算出されてもよい。

[0254] また、上記各実施形態は、選択される広告コンテンツと対応付けられた広告属性情報が、１つの広告属性情報（算出された最終優先度が最大である広告属性情報）のみからなるように構成されていたが、複数の広告属性情報を含むように構成されていてもよい。この場合、上記各実施形態は、算出された最終優先度が高い広告属性情報と対応付けられた広告コンテンツほど、優先して選択するように構成されていることが好適である。

[0255] また、上記各実施形態の変形例は、サービス制御サーバ４ａ及びメディア

サーバ４ｂに代えて、サービス制御サーバ４ａ及びメディアサーバ４ｂの両方の機能を有するサーバを備えていてもよい。

また、上記各実施形態の変形例は、サービス制御サーバ４ａ及びユーザ情報管理サーバ４ｃに代えて、サービス制御サーバ４ａ及びユーザ情報管理サーバ４ｃの両方の機能を有するサーバを備えていてもよい。

[0256] また、上記各実施形態においては、メディアサーバ４ｂがメディア機能部６０のすべてを有していたが、第１のサーバがメディア機能部６０の一部（メディア制御機能部）を有するとともに第２のサーバがメディア機能部６０の残余の部分（メディア配信機能部）を有していてもよい。

また、上記各実施形態の変形例は、メディア機能部６０のうちのメディア配信機能部を有するサーバを複数備えていてもよい。

[0257] また、上記各実施形態の変形例において、接続制御システム３は、複数の接続制御サーバ（接続制御サーバ３ａ，３ｂ等）を含んでいたが、１つの接続制御サーバのみを含んでいてもよい。

[0258] また、上記各実施形態において、コンテンツ配信システム１は、プレイリスト情報又は広告属性情報を、ＳＩＰに従って送信するように構成されていたが、他の通信プロトコル（例えば、ＲＴＳＰ）に従って送信するように構成されていてもよい。

[0259] なお、上記各実施形態において、ユーザ端末２は、セットトップボックスであったが、携帯電話装置、ＰＤＡ（Ｐｅｒｓｏｎａｌ Ｄａｔａ Ａｓｓｉｓｔａｎｃｅ）、スマートフォン、ＰＨＳ（Ｐｅｒｓｏｎａｌ Ｈａｎｄｙｐｈｏｎｅ Ｓｙｓｔｅｍ）、ゲーム機、カーナビゲーション装置、又は、パーソナル・コンピュータ等であってもよい。

また、上記各実施形態において、コンテンツは動画であったが、映像のみ又は音声のみであってもよい。

[0260] また、上記各実施形態においては、コンテンツ配信システム１の構成要素は、ＩＭＳ（ＩＰ Ｍｕｌｔｉｍｅｄｉａ Ｓｕｂｓｙｓｔｅｍ）を構成する構成要素として表現されていたが、ＭＭＳ（Ｍｕｌｔｉｍｅｄｉａ Ｍｅ

ｓｓａｇｉｎｇ　Ｓｅｒｖｉｃｅ）を構成する構成要素として表現されていてもよい。

[0261] また、上記各実施形態においてプログラムは、記憶装置に記憶されていたが、コンピュータが読み取り可能な記録媒体に記憶されていてもよい。例えば、記録媒体は、フレキシブルディスク、光ディスク、光磁気ディスク、及び、半導体メモリ等の可搬性を有する媒体である。

[0262] なお、上記各実施形態においてコンテンツ配信システム１の各機能は、ＣＰＵがプログラム（ソフトウェア）を実行することにより実現されていたが、回路等のハードウェアにより実現されていてもよい。

[0263] なお、本発明は、日本国にて２００８年１１月１８日に出願された特願２００８－２９４２７０の特許出願に基づく優先権主張の利益を享受するものであり、当該特許出願にて開示された内容のすべてが本明細書に含まれるものとする。

産業上の利用可能性

[0264] 本発明は、ＩＰ網を介してコンテンツを配信するビデオオンデマンドシステム、及び、ＩＰ網を介してテレビ放送を行うＩＰＴＶシステム等に適用可能である。

符号の説明

[0265] １　コンテンツ配信システム
２　ユーザ端末
３　接続制御システム
３ａ，３ｂ　接続制御サーバ
４　アプリケーションサーバシステム
４ａ　サービス制御サーバ
４ｂ　メディアサーバ
４ｃ　ユーザ情報管理サーバ
１１　要求送信部
１２　プレイリスト受信部

１３　視聴要求送信部

１４　コンテンツ出力部

３１　呼接続制御部

３２　ＩＭＳ認証部

４０　サービス制御機能部

４１　情報送受信部

４２　コンテンツ基礎情報記憶部

４３　広告属性情報記憶部

４４　広告挿入情報記憶部

４５　プレイリスト生成部

４６　配信要求部

４７　広告選択用情報取得部

４８　広告コンテンツ選択部

５０　ユーザプロファイルサーバ機能部

５１　ユーザ基礎情報記憶部

６０　メディア機能部

６１　情報送受信部

６２　コンテンツデータ記憶部

６３　コンテンツ配信制御部

６５　コンテンツ配信部

６６　広告属性情報記憶部

６７　広告挿入情報記憶部

６８　プレイリスト生成部

８０　トランスポート機能部

８１　帯域確保部

８２　端末認証部

１０１　送信要求受信部

１０２　広告コンテンツ選択部

１０３　選択広告コンテンツ特定情報送信部

ＡＤ　　選択広告コンテンツ特定情報

ＢＤ　　ボディ部

ＢＤ１　第１の部分

ＢＤ２　第２の部分

ＣＩ　　コンテンツ基礎情報

ＨＤ　　ヘッダ部

ＮＷ１　ユーザ側通信回線

ＮＷ２　サービス提供者側通信回線

ＰＬ　　プレイリスト情報

ＲＣ　　コンテンツ記憶部

ＵＩ　　ユーザ基礎情報

請求の範囲

[請求項1] アプリケーションサーバシステムと接続制御システムとを含み、

前記接続制御システムは、ユーザ端末により送信された端末特定情報を受信し当該受信した端末特定情報に基づいて前記アプリケーションサーバシステムと当該ユーザ端末との間の接続を確立するように構成され、

前記アプリケーションサーバシステムは、

広告コンテンツを表す広告コンテンツデータ、及び、メインコンテンツを表すメインコンテンツデータ、を記憶するコンテンツ記憶手段と、

前記メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つ前記ユーザ端末により送信されたコンテンツ送信要求を、前記接続制御システムを介して受信する送信要求受信手段と、

前記広告コンテンツの属性を表す広告属性情報を含む広告選択用情報に基づいて、前記記憶されている広告コンテンツデータを選択する広告コンテンツ選択手段と、

前記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、前記コンテンツ送信要求を送信してきた前記ユーザ端末へ、前記接続制御システムを介して送信する選択広告コンテンツ特定情報送信手段と、

を備えるコンテンツ配信システム。

[請求項2] 請求項１に記載のコンテンツ配信システムであって、

前記ユーザ端末は、

前記アプリケーションサーバシステムにより送信された前記選択広告コンテンツ特定情報を受信する選択広告コンテンツ特定情報受信手段と、

前記アプリケーションサーバシステムとの間の接続が前記接続制御システムにより確立されている場合に、前記メインコンテンツ識別情

報を含むメインコンテンツ視聴要求と、前記受信した選択広告コンテンツ特定情報を含む広告コンテンツ視聴要求と、を当該アプリケーションサーバシステムへ送信するコンテンツ視聴要求送信手段と、

を備え、

前記アプリケーションサーバシステムは、前記ユーザ端末により送信された前記メインコンテンツ視聴要求を受信し、当該受信したメインコンテンツ視聴要求に含まれるメインコンテンツ識別情報により識別されるメインコンテンツデータを当該ユーザ端末へ送信するとともに、当該ユーザ端末により送信された前記広告コンテンツ視聴要求を受信し、当該受信した広告コンテンツ視聴要求に含まれる選択広告コンテンツ特定情報により特定される広告コンテンツデータを当該ユーザ端末へ送信するコンテンツ送信手段を備えるコンテンツ配信システム。

[請求項3] 請求項１又は請求項２に記載のコンテンツ配信システムであって、

前記ユーザ端末は、前記アプリケーションサーバシステムにより送信されたメインコンテンツデータ及び広告コンテンツデータを受信し、当該受信したメインコンテンツデータ及び広告コンテンツデータに基づいて、当該メインコンテンツデータが表すメインコンテンツに当該広告コンテンツデータが表す広告コンテンツを挿入した視聴用コンテンツを出力するコンテンツ出力手段を備えるコンテンツ配信システム。

[請求項4] 請求項１乃至請求項３のいずれか一項に記載のコンテンツ配信システムであって、

前記選択広告コンテンツ特定情報送信手段は、前記コンテンツ送信要求に含まれる前記メインコンテンツ識別情報と、前記選択広告コンテンツ特定情報と、を含む情報であって、当該メインコンテンツ識別情報により識別されるメインコンテンツ及び当該選択広告コンテンツ特定情報により特定される広告コンテンツが出力される順序を表す情

報を含む情報であるプレイリスト情報を、前記接続制御システムを介して、前記コンテンツ送信要求を送信してきた前記ユーザ端末へ送信するように構成され、

前記選択広告コンテンツ特定情報受信手段は、前記アプリケーションサーバシステムにより送信された前記プレイリスト情報を受信するように構成され、

前記コンテンツ視聴要求送信手段は、前記受信されたプレイリスト情報に基づいて、前記メインコンテンツ視聴要求及び前記広告コンテンツ視聴要求を前記アプリケーションサーバシステムへ送信するように構成されたコンテンツ配信システム。

[請求項5] 請求項１乃至請求項４のいずれか一項に記載のコンテンツ配信システムであって、

前記コンテンツ記憶手段は、前記広告コンテンツデータと、当該広告コンテンツデータが表す広告コンテンツの属性を表す広告属性情報と、を対応付けて記憶するように構成され、

前記広告選択用情報は、前記広告属性情報を特定するための情報であって前記ユーザ端末のユーザを識別するためのユーザ識別情報と対応付けられた情報であるユーザ基礎情報を含み、

前記広告コンテンツ選択手段は、前記コンテンツ送信要求を送信してきたユーザ端末のユーザを識別するためのユーザ識別情報と対応付けられたユーザ基礎情報により特定される広告属性情報と対応付けて記憶されている広告コンテンツデータを選択するように構成されたコンテンツ配信システム。

[請求項6] 請求項１乃至請求項５のいずれか一項に記載のコンテンツ配信システムであって、

前記コンテンツ記憶手段は、前記広告コンテンツデータと、当該広告コンテンツデータが表す広告コンテンツの属性を表す広告属性情報と、を対応付けて記憶するように構成され、

前記広告選択用情報は、前記広告属性情報を特定するための情報であって前記メインコンテンツを識別するメインコンテンツ識別情報と対応付けられた情報であるコンテンツ基礎情報を含み、

前記広告コンテンツ選択手段は、前記受信されたコンテンツ送信要求に含まれるメインコンテンツ識別情報と対応付けられたコンテンツ基礎情報により特定される広告属性情報と対応付けて記憶されている広告コンテンツデータを選択するように構成されたコンテンツ配信システム。

[請求項7] 請求項１乃至請求項６のいずれか一項に記載のコンテンツ配信システムであって、

前記選択広告コンテンツ特定情報送信手段は、前記接続制御システムが前記接続を確立するための処理を行う際に、前記選択広告コンテンツ特定情報を当該接続制御システムを介して前記ユーザ端末へ送信するように構成されたコンテンツ配信システム。

[請求項8] 請求項７に記載のコンテンツ配信システムであって、

前記接続制御システムは、前記ユーザ端末及び前記アプリケーションサーバシステムのそれぞれとの間で所定の接続確立用メッセージを授受することにより前記接続を確立するように構成され、

前記選択広告コンテンツ特定情報送信手段は、前記接続確立用メッセージに前記選択広告コンテンツ特定情報を含ませることにより、当該選択広告コンテンツ特定情報を当該接続制御システムを介して前記ユーザ端末へ送信するように構成されたコンテンツ配信システム。

[請求項9] 請求項１乃至請求項８のいずれか一項に記載のコンテンツ配信システムであって、

前記アプリケーションサーバシステムは、サービス制御サーバとメディアサーバとを含み、

前記サービス制御サーバは、前記送信要求受信手段、前記広告コンテンツ選択手段及び前記選択広告コンテンツ特定情報送信手段を備え

、

前記メディアサーバは、前記コンテンツ記憶手段を備えるコンテンツ配信システム。

[請求項10] 請求項１乃至請求項８のいずれか一項に記載のコンテンツ配信システムであって、

前記アプリケーションサーバシステムは、サービス制御サーバとメディアサーバとを含み、

前記サービス制御サーバは、前記送信要求受信手段を備え、

前記メディアサーバは、前記コンテンツ記憶手段、前記広告コンテンツ選択手段及び前記選択広告コンテンツ特定情報送信手段を備え、

前記サービス制御サーバは、前記広告選択用情報を、前記接続制御システムを介して前記メディアサーバへ送信する広告選択用情報送信手段を備え、

前記メディアサーバは、前記サービス制御サーバにより送信された前記広告選択用情報を受信する広告選択用情報受信手段を備え、

前記広告コンテンツ選択手段は、前記受信された広告選択用情報に基づいて、前記広告コンテンツデータを選択するように構成されたコンテンツ配信システム。

[請求項11] アプリケーションサーバシステムと接続制御システムとを含み、

前記接続制御システムは、ユーザ端末（Ｕｓｅｒ　Ｅｑｕｉｐｍｅｎｔ）により送信された端末特定情報を受信し当該受信した端末特定情報に基づいて前記アプリケーションサーバシステムと当該ユーザ端末との間の接続を確立するコアＩＭＳ部（Ｃｏｒｅ　ＩＭＳ（Ｉｎｔｅｒｎｅｔ　Ｐｒｏｔｏｃｏｌ　Ｍｕｌｔｉｍｅｄｉａ　Ｓｕｂｓｙｓｔｅｍ））を備え、

前記アプリケーションサーバシステムは、

前記コアＩＭＳ部により接続が確立された前記ユーザ端末へ、コンテンツを表すコンテンツデータを送信するメディア機能部（Ｍｅｄｉ

ａ　Ｆｕｎｃｔｉｏｎｓ）と、

前記メディア機能部により提供されるサービスを制御するサービス制御機能部（Ｓｅｒｖｉｃｅ　Ｃｏｎｔｒｏｌ　Ｆｕｎｃｔｉｏｎｓ）と、

前記ユーザ端末のユーザのプロファイル情報を記憶するユーザプロファイルサーバ機能部（Ｕｓｅｒ　Ｐｒｏｆｉｌｅ　Ｓｅｒｖｅｒ　Ｆｕｎｃｔｉｏｎｓ）と、を備え、

前記メディア機能部は、

広告コンテンツを表す広告コンテンツデータ、及び、メインコンテンツを表すメインコンテンツデータ、を記憶するコンテンツ記憶手段を備え、

前記サービス制御機能部は、

前記メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つ前記ユーザ端末により送信されたコンテンツ送信要求を、前記コアＩＭＳ部を介して受信する送信要求受信手段と、

前記広告コンテンツの属性を表す広告属性情報を含み、且つ、前記ユーザプロファイルサーバ機能部、前記サービス制御機能部又は前記接続制御システムにより予め記憶された広告選択用情報に基づいて、前記記憶されている広告コンテンツデータを選択する広告コンテンツ選択手段と、

前記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、前記コンテンツ送信要求を送信してきた前記ユーザ端末へ、前記コアＩＭＳ部を介して送信する選択広告コンテンツ特定情報送信手段と、

を備えるコンテンツ配信システム。

[請求項12] 請求項１１に記載のコンテンツ配信システムであって、

前記ユーザ端末は、

前記サービス制御機能部により送信された前記選択広告コンテンツ

特定情報を受信する選択広告コンテンツ特定情報受信手段と、

前記メディア機能部との間の接続が前記コアＩＭＳ部により確立されている場合に、前記メインコンテンツ識別情報を含むメインコンテンツ視聴要求と、前記受信した選択広告コンテンツ特定情報を含む広告コンテンツ視聴要求と、を当該メディア機能部へ送信するコンテンツ視聴要求送信手段と、

を備え、

前記メディア機能部は、前記ユーザ端末により送信された前記メインコンテンツ視聴要求を受信し、当該受信したメインコンテンツ視聴要求に含まれるメインコンテンツ識別情報により識別されるメインコンテンツデータを当該ユーザ端末へ送信するとともに、当該ユーザ端末により送信された前記広告コンテンツ視聴要求を受信し、当該受信した広告コンテンツ視聴要求に含まれる選択広告コンテンツ特定情報により特定される広告コンテンツデータを当該ユーザ端末へ送信するコンテンツ送信手段を備えるコンテンツ配信システム。

[請求項13] 請求項１１又は請求項１２に記載のコンテンツ配信システムであって、

前記ユーザ端末は、前記メディア機能部により送信されたメインコンテンツデータ及び広告コンテンツデータを受信し、当該受信したメインコンテンツデータ及び広告コンテンツデータに基づいて、当該メインコンテンツデータが表すメインコンテンツに当該広告コンテンツデータが表す広告コンテンツを挿入した視聴用コンテンツを出力するコンテンツ出力手段を備えるコンテンツ配信システム。

[請求項14] 請求項１１乃至請求項１３のいずれか一項に記載のコンテンツ配信システムであって、

前記選択広告コンテンツ特定情報送信手段は、前記コンテンツ送信要求に含まれる前記メインコンテンツ識別情報と、前記選択広告コンテンツ特定情報と、を含む情報であって、当該メインコンテンツ識別

情報により識別されるメインコンテンツ及び当該選択広告コンテンツ特定情報により特定される広告コンテンツが出力される順序を表す情報を含む情報であるプレイリスト情報を、前記コアＩＭＳ部を介して、前記コンテンツ送信要求を送信してきた前記ユーザ端末へ送信するように構成され、

前記選択広告コンテンツ特定情報受信手段は、前記サービス制御機能部により送信された前記プレイリスト情報を受信するように構成され、

前記コンテンツ視聴要求送信手段は、前記受信されたプレイリスト情報に基づいて、前記メインコンテンツ視聴要求及び前記広告コンテンツ視聴要求を前記メディア機能部へ送信するように構成されたコンテンツ配信システム。

[請求項15] 接続制御システムが、ユーザ端末により送信された端末特定情報を受信し当該受信した端末特定情報に基づいてアプリケーションサーバシステムと当該ユーザ端末との間の接続を確立し、

前記アプリケーションサーバシステムが、メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つ前記ユーザ端末により送信されたコンテンツ送信要求を、前記接続制御システムを介して受信し、

広告コンテンツを表す広告コンテンツデータ、及び、メインコンテンツを表すメインコンテンツデータ、を記憶する記憶装置に記憶されている広告コンテンツデータを、広告コンテンツの属性を表す広告属性情報を含む広告選択用情報に基づいて選択し、

前記アプリケーションサーバシステムが、前記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、前記コンテンツ送信要求を送信してきた前記ユーザ端末へ、前記接続制御システムを介して送信する、コンテンツ配信方法。

[請求項16] 請求項１５に記載のコンテンツ配信方法であって、

前記ユーザ端末が、前記アプリケーションサーバシステムにより送信された前記選択広告コンテンツ特定情報を受信し、

前記ユーザ端末と前記アプリケーションサーバシステムとの間の接続が前記接続制御システムにより確立されている場合に、当該ユーザ端末が、前記メインコンテンツ識別情報を含むメインコンテンツ視聴要求と、前記受信した選択広告コンテンツ特定情報を含む広告コンテンツ視聴要求と、を当該アプリケーションサーバシステムへ送信し、

前記アプリケーションサーバシステムが、前記ユーザ端末により送信された前記メインコンテンツ視聴要求を受信し、当該受信したメインコンテンツ視聴要求に含まれるメインコンテンツ識別情報により識別されるメインコンテンツデータを当該ユーザ端末へ送信するとともに、当該ユーザ端末により送信された前記広告コンテンツ視聴要求を受信し、当該受信した広告コンテンツ視聴要求に含まれる選択広告コンテンツ特定情報により特定される広告コンテンツデータを当該ユーザ端末へ送信する、コンテンツ配信方法。

[請求項17] 請求項１５又は請求項１６に記載のコンテンツ配信方法であって、

前記ユーザ端末が、前記アプリケーションサーバシステムにより送信されたメインコンテンツデータ及び広告コンテンツデータを受信し、当該受信したメインコンテンツデータ及び広告コンテンツデータに基づいて、当該メインコンテンツデータが表すメインコンテンツに当該広告コンテンツデータが表す広告コンテンツを挿入した視聴用コンテンツを出力する、コンテンツ配信方法。

[請求項18] 請求項１５乃至請求項１７のいずれか一項に記載のコンテンツ配信方法であって、

前記アプリケーションサーバシステムが、前記コンテンツ送信要求に含まれる前記メインコンテンツ識別情報と、前記選択広告コンテンツ特定情報と、を含む情報であって、当該メインコンテンツ識別情報により識別されるメインコンテンツ及び当該選択広告コンテンツ特定

情報により特定される広告コンテンツが出力される順序を表す情報を含む情報であるプレイリスト情報を、前記接続制御システムを介して、前記コンテンツ送信要求を送信してきた前記ユーザ端末へ送信し、

前記ユーザ端末が、前記アプリケーションサーバシステムにより送信された前記プレイリスト情報を受信し、

前記ユーザ端末が、前記受信されたプレイリスト情報に基づいて、前記メインコンテンツ視聴要求及び前記広告コンテンツ視聴要求を前記アプリケーションサーバシステムへ送信する、コンテンツ配信方法。

[請求項19] サービス制御サーバに、

メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つユーザ端末により送信されたコンテンツ送信要求を、メディアサーバと当該ユーザ端末との間の接続を確立する接続制御システムを介して受信する送信要求受信手段と、

広告コンテンツの属性を表す広告属性情報を含む広告選択用情報に基づいて、予め記憶装置に記憶されている広告コンテンツデータを選択する広告コンテンツ選択手段と、

前記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、前記コンテンツ送信要求を送信してきた前記ユーザ端末へ、前記接続制御システムを介して送信する選択広告コンテンツ特定情報送信手段と、

を実現させるためのプログラム。

[請求項20] 請求項１９に記載のプログラムであって、

前記選択広告コンテンツ特定情報送信手段は、前記コンテンツ送信要求に含まれる前記メインコンテンツ識別情報と、前記選択広告コンテンツ特定情報と、を含む情報であって、当該メインコンテンツ識別情報により識別されるメインコンテンツ及び当該選択広告コンテンツ特定情報により特定される広告コンテンツが出力される順序を表す情

報を含む情報であるプレイリスト情報を、前記コンテンツ送信要求を送信してきた前記ユーザ端末へ、前記接続制御システムを介して送信するように構成されたプログラム。

[請求項21] ユーザ端末に、

選択された広告コンテンツデータを特定する情報であって、アプリケーションサーバシステムにより送信された情報である選択広告コンテンツ特定情報を、当該アプリケーションサーバシステムと当該ユーザ端末との間の接続を確立する接続制御システムを介して受信する選択広告コンテンツ特定情報受信手段と、

前記アプリケーションサーバシステムとの間の接続が前記接続制御システムにより確立されている場合に、メインコンテンツを識別するためのメインコンテンツ識別情報を含むメインコンテンツ視聴要求と、前記受信した選択広告コンテンツ特定情報を含む広告コンテンツ視聴要求と、を当該アプリケーションサーバシステムへ送信するコンテンツ視聴要求送信手段と、

を実現させるためのプログラム。

[請求項22] 請求項２１に記載のプログラムであって、

前記ユーザ端末に、更に、

前記アプリケーションサーバシステムにより送信されたメインコンテンツデータ及び広告コンテンツデータを受信し、当該受信したメインコンテンツデータ及び広告コンテンツデータに基づいて、当該メインコンテンツデータが表すメインコンテンツに当該広告コンテンツデータが表す広告コンテンツを挿入した視聴用コンテンツを出力するコンテンツ出力手段を実現させるためのプログラム。

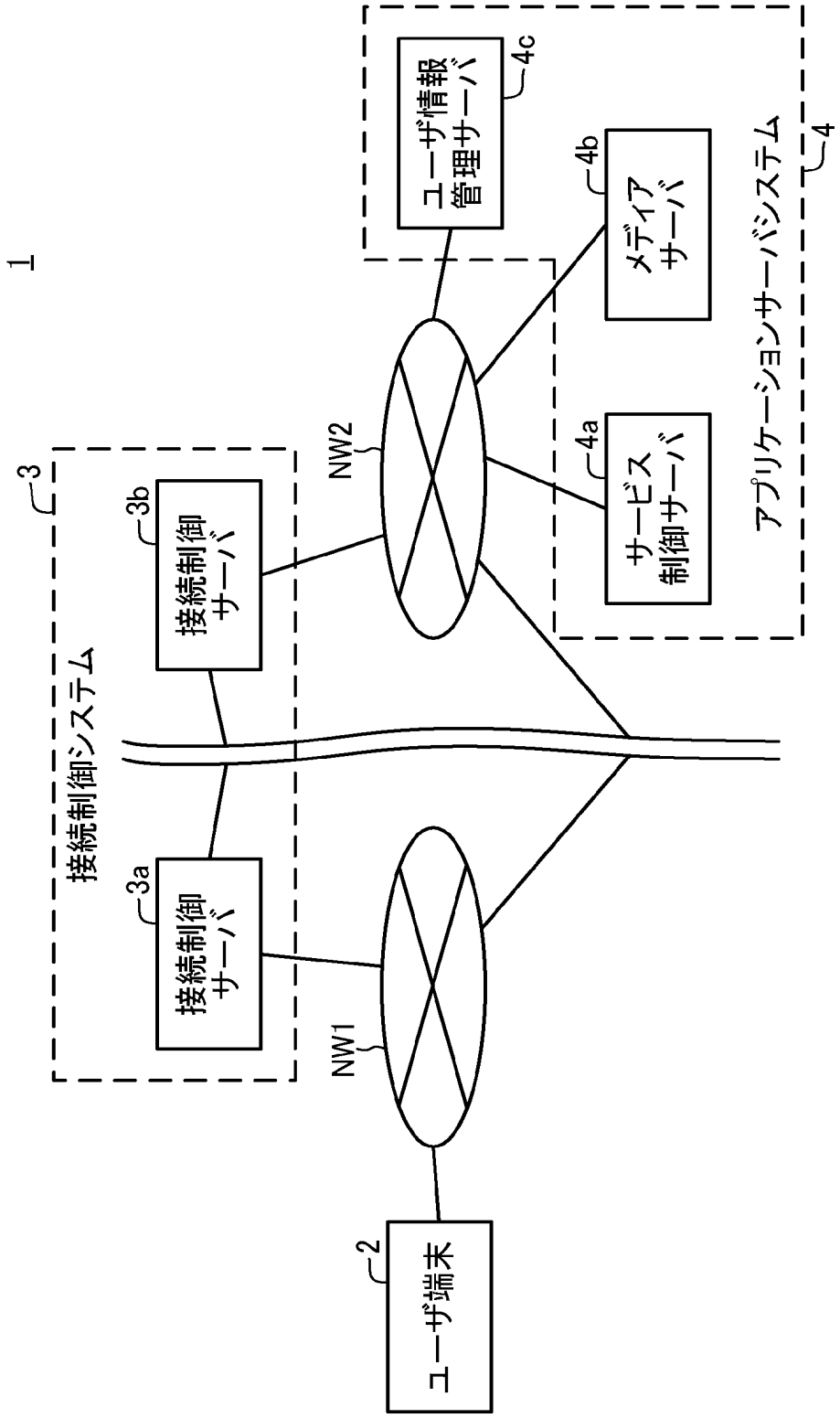
[請求項23] 請求項２１又は請求項２２に記載のプログラムであって、

前記選択広告コンテンツ特定情報受信手段は、前記メインコンテンツ識別情報と、前記選択広告コンテンツ特定情報と、を含む情報であって、当該メインコンテンツ識別情報により識別されるメインコンテ

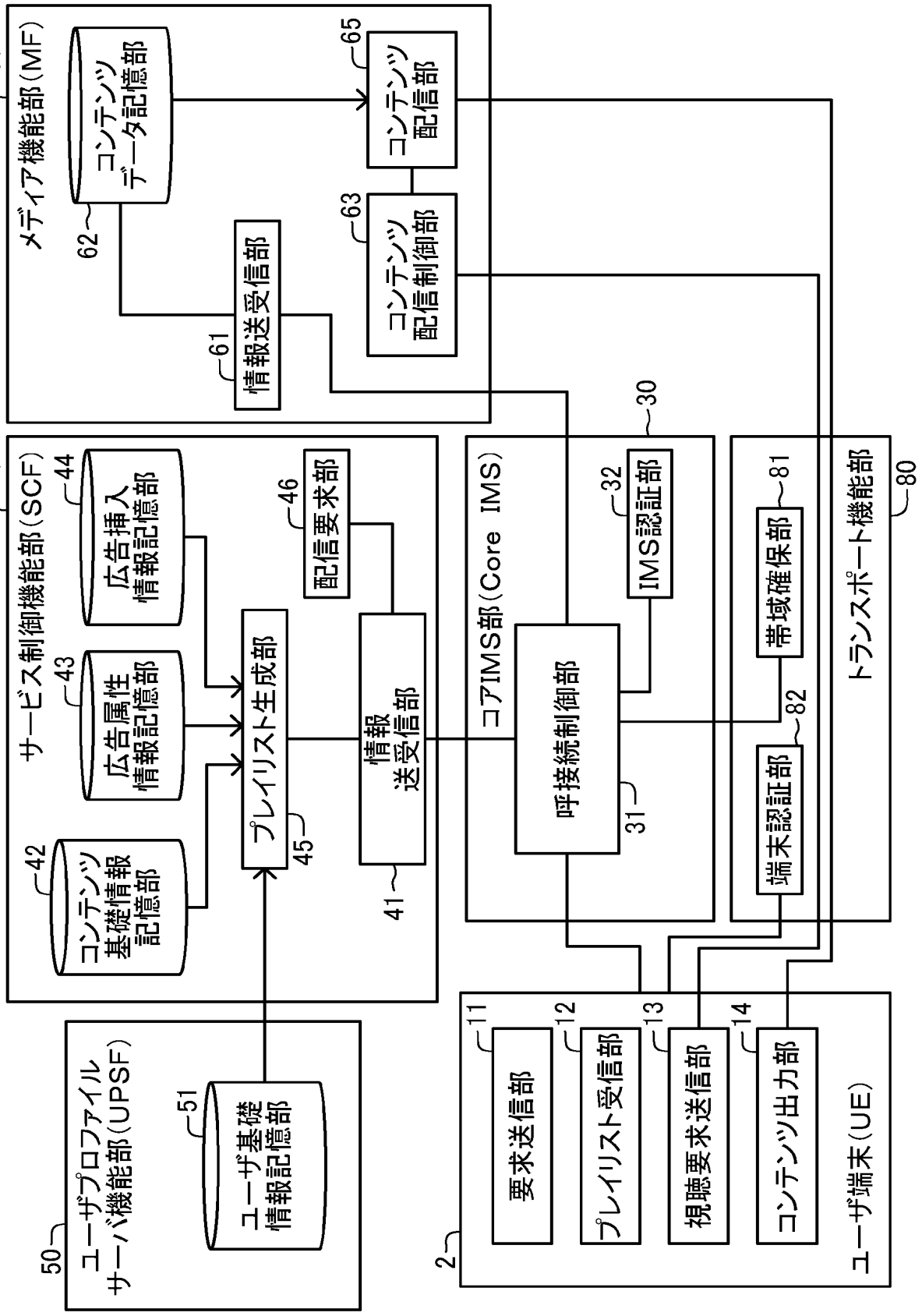
ンツ及び当該選択広告コンテンツ特定情報により特定される広告コンテンツが出力される順序を表す情報を含む情報であって、前記アプリケーションサーバシステムにより送信された情報であるプレイリスト情報を受信するように構成され、

前記コンテンツ視聴要求送信手段は、前記受信されたプレイリスト情報に基づいて、前記メインコンテンツ視聴要求及び前記広告コンテンツ視聴要求を前記アプリケーションサーバシステムへ送信するように構成されたプログラム。

[図1]


1
3
接続制御システム
3a
接続制御サーバ
3b
接続制御サーバ
NW1
NW2
2
ユーザ端末
4
アプリケーションサーバシステム
4a
サービス制御サーバ
4b
メディアサーバ
4c
ユーザ情報管理サーバ

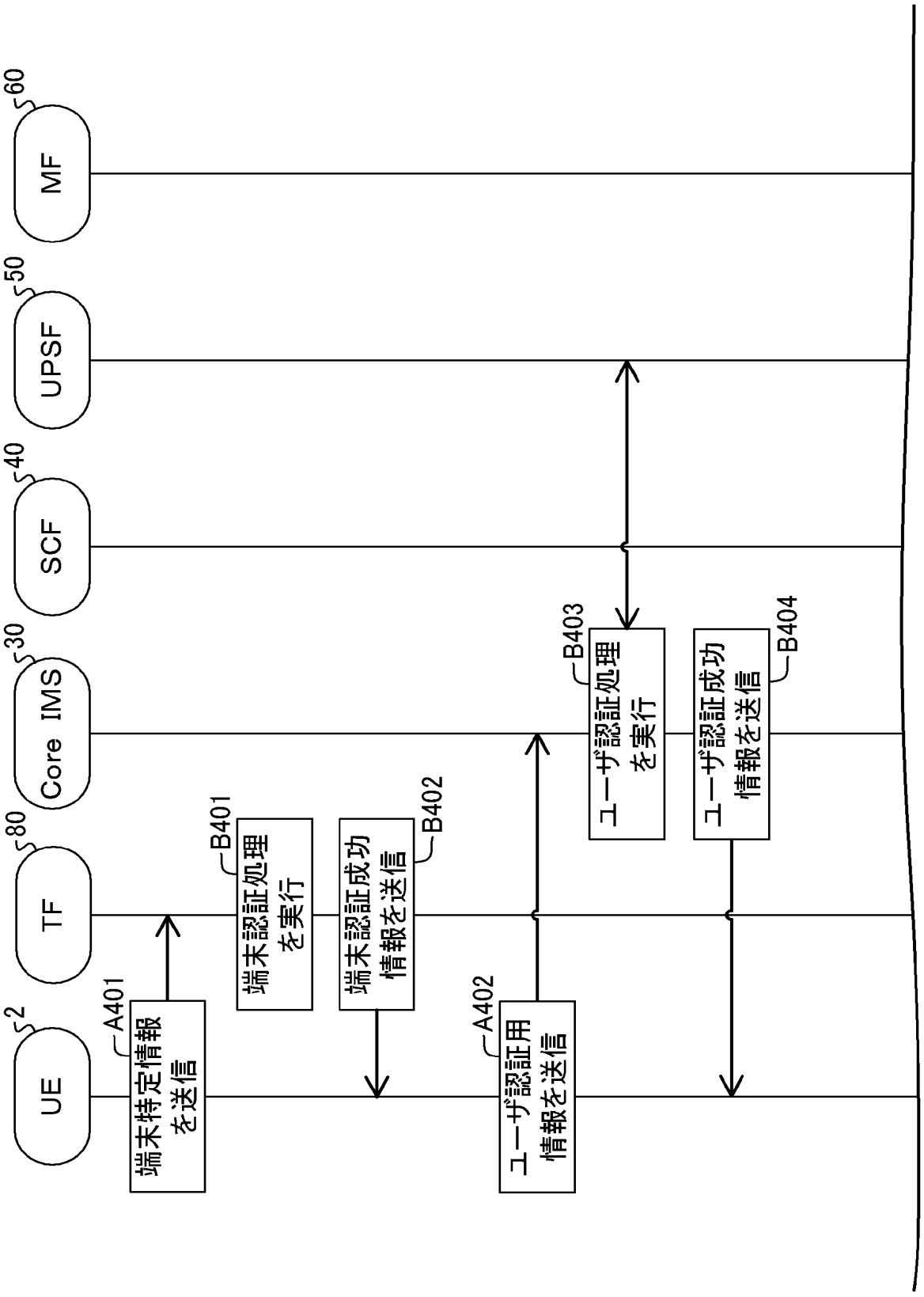
[図2]


メディア機能部(MF)
60
コンテンツデータ記憶部
62
情報送受信部
61
コンテンツ配信部
65
コンテンツ配信制御部
63
サービス制御機能部(SCF)
40
広告挿入情報記憶部
44
広告属性情報記憶部
43
コンテンツ基礎情報記憶部
42
プレイリスト生成部
45
配信要求部
46
情報送受信部
41
コアIMS部(Core IMS)
30
呼接続制御部
31
IMS認証部
32
トランスポート機能部
80
帯域確保部
81
端末認証部
82
ユーザプロファイルサーバ機能部(UPSF)
50
ユーザ基礎情報記憶部
51
ユーザ端末(UE)
2
要求送信部
11
プレイリスト受信部
12
視聴要求送信部
13
コンテンツ出力部
14

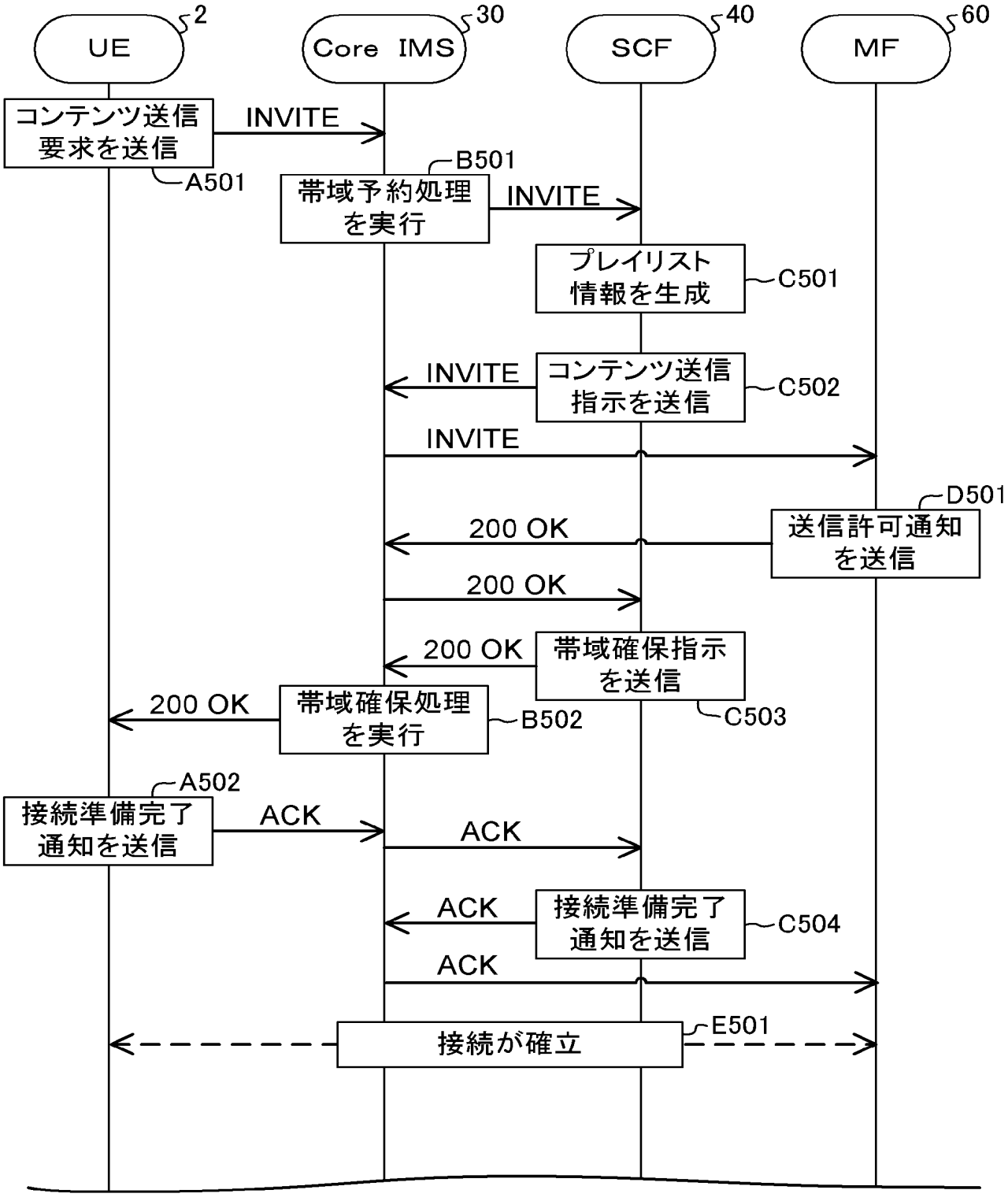
[図3]

広告属性情報	優先度情報
自動車	1
不動産	2
旅行	4
保険	5
携帯電話	3
コーヒー	3
小道具	4
⋮	⋮

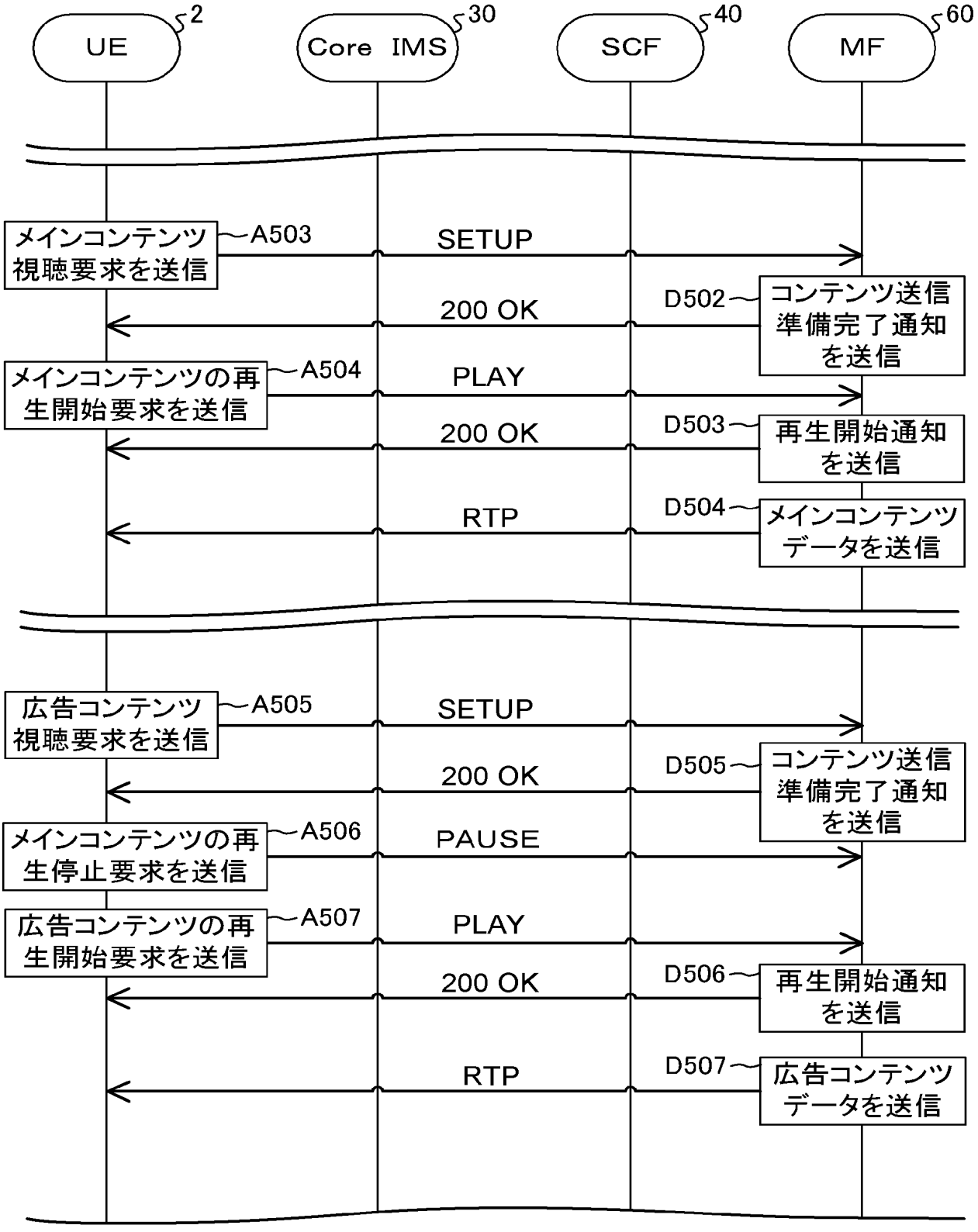
[図4]


UE
2
TF
80
Core IMS
30
SCF
40
UPSF
50
MF
60
A401
端末特定情報を送信
B401
端末認証処理を実行
B402
端末認証成功情報を送信
A402
ユーザ認証用情報を送信
B403
ユーザ認証処理を実行
B404
ユーザ認証成功情報を送信

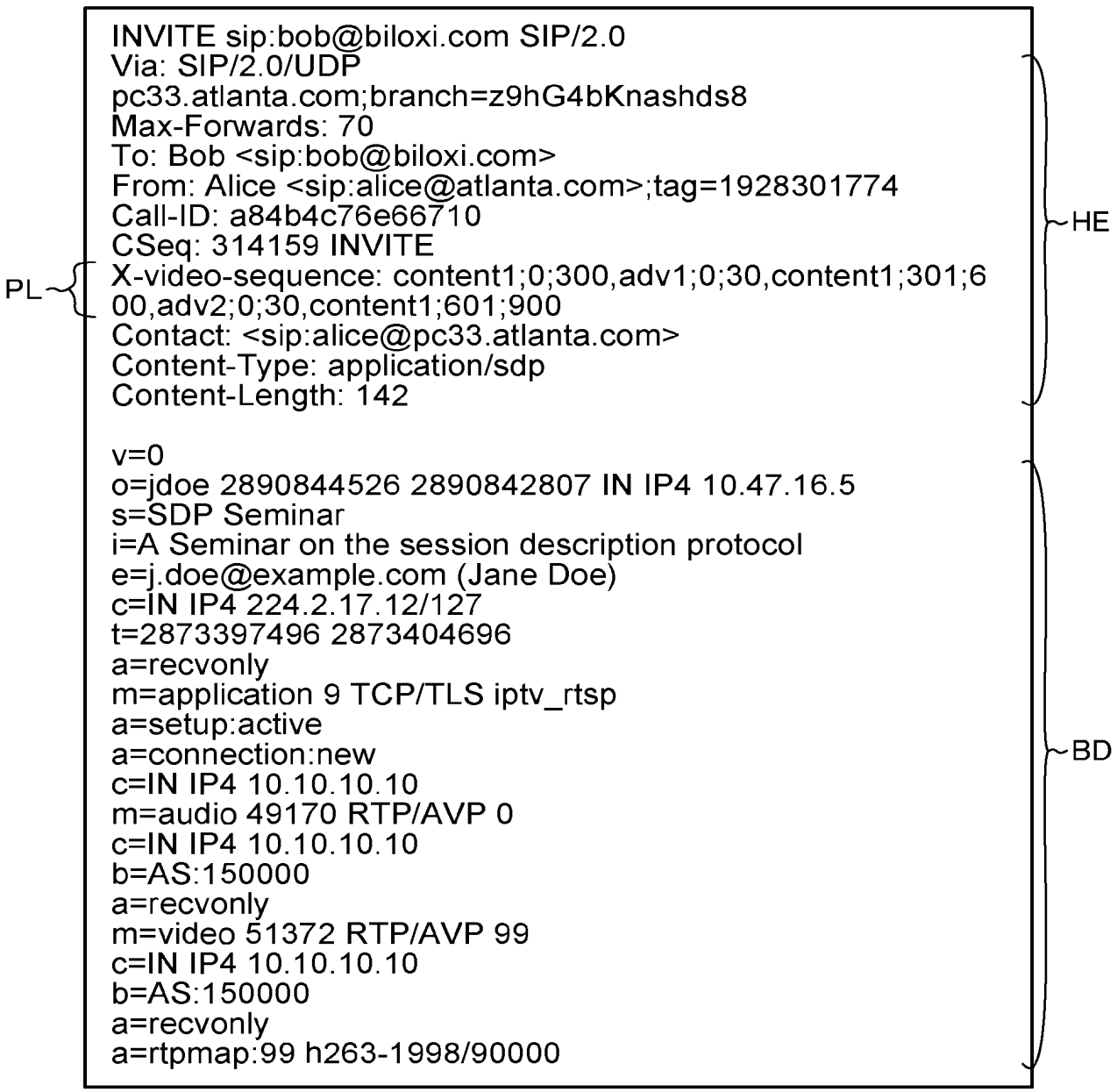
[図5]


UE
2
Core IMS
30
SCF
40
MF
60
コンテンツ送信
要求を送信
A501
INVITE
B501
帯域予約処理
を実行
INVITE
プレイリスト
情報を生成
C501
INVITE
コンテンツ送信
指示を送信
C502
INVITE
D501
送信許可通知
を送信
200 OK
200 OK
200 OK
帯域確保指示
を送信
C503
200 OK
帯域確保処理
を実行
B502
A502
接続準備完了
通知を送信
ACK
ACK
ACK
接続準備完了
通知を送信
C504
ACK
E501
接続が確立

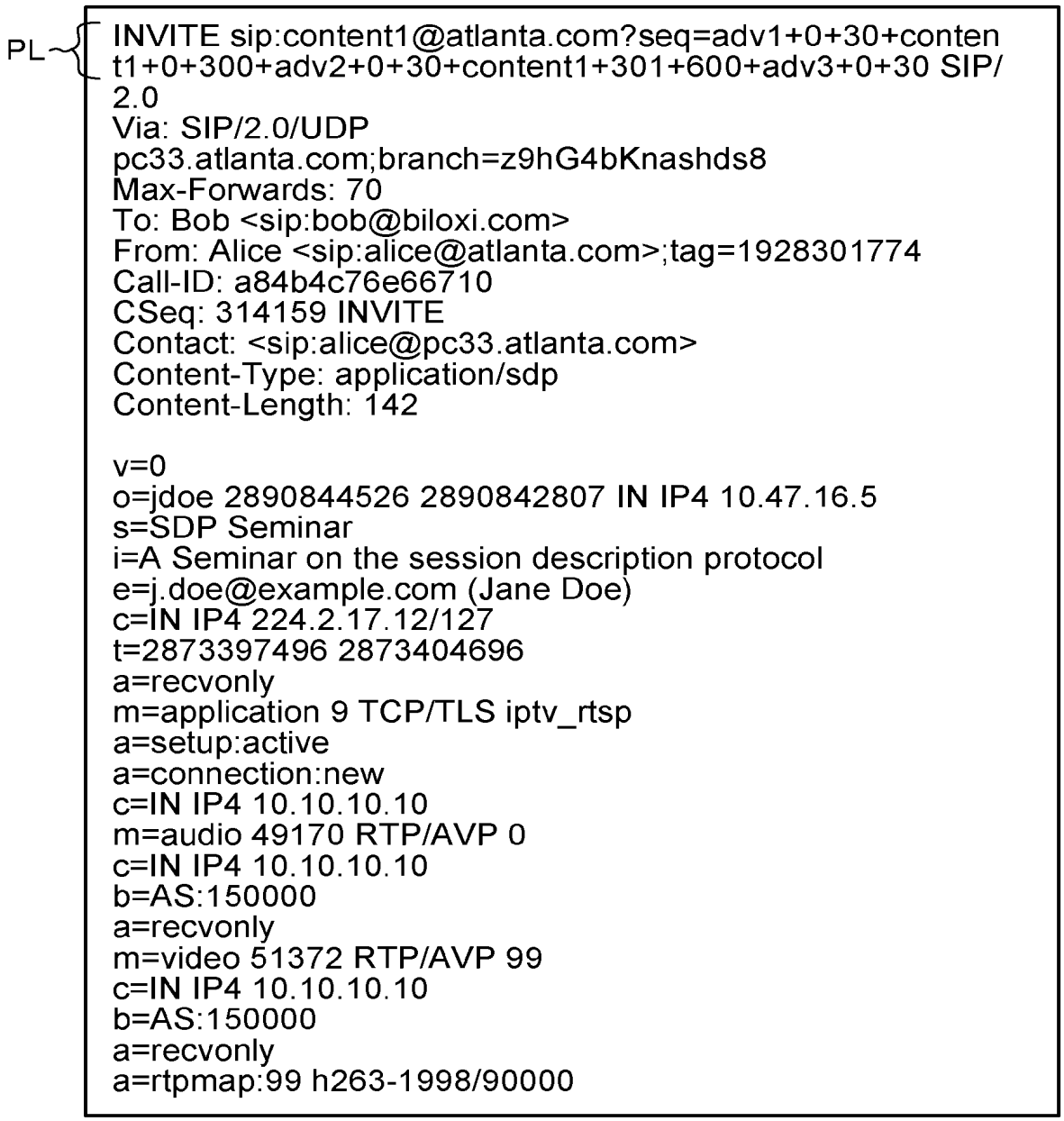
[図6]


UE
2
Core IMS
30
SCF
40
MF
60
メインコンテンツ視聴要求を送信
A503
SETUP
200 OK
D502
コンテンツ送信準備完了通知を送信
メインコンテンツの再生開始要求を送信
A504
PLAY
200 OK
D503
再生開始通知を送信
RTP
D504
メインコンテンツデータを送信
広告コンテンツ視聴要求を送信
A505
SETUP
200 OK
D505
コンテンツ送信準備完了通知を送信
メインコンテンツの再生停止要求を送信
A506
PAUSE
広告コンテンツの再生開始要求を送信
A507
PLAY
200 OK
D506
再生開始通知を送信
RTP
D507
広告コンテンツデータを送信

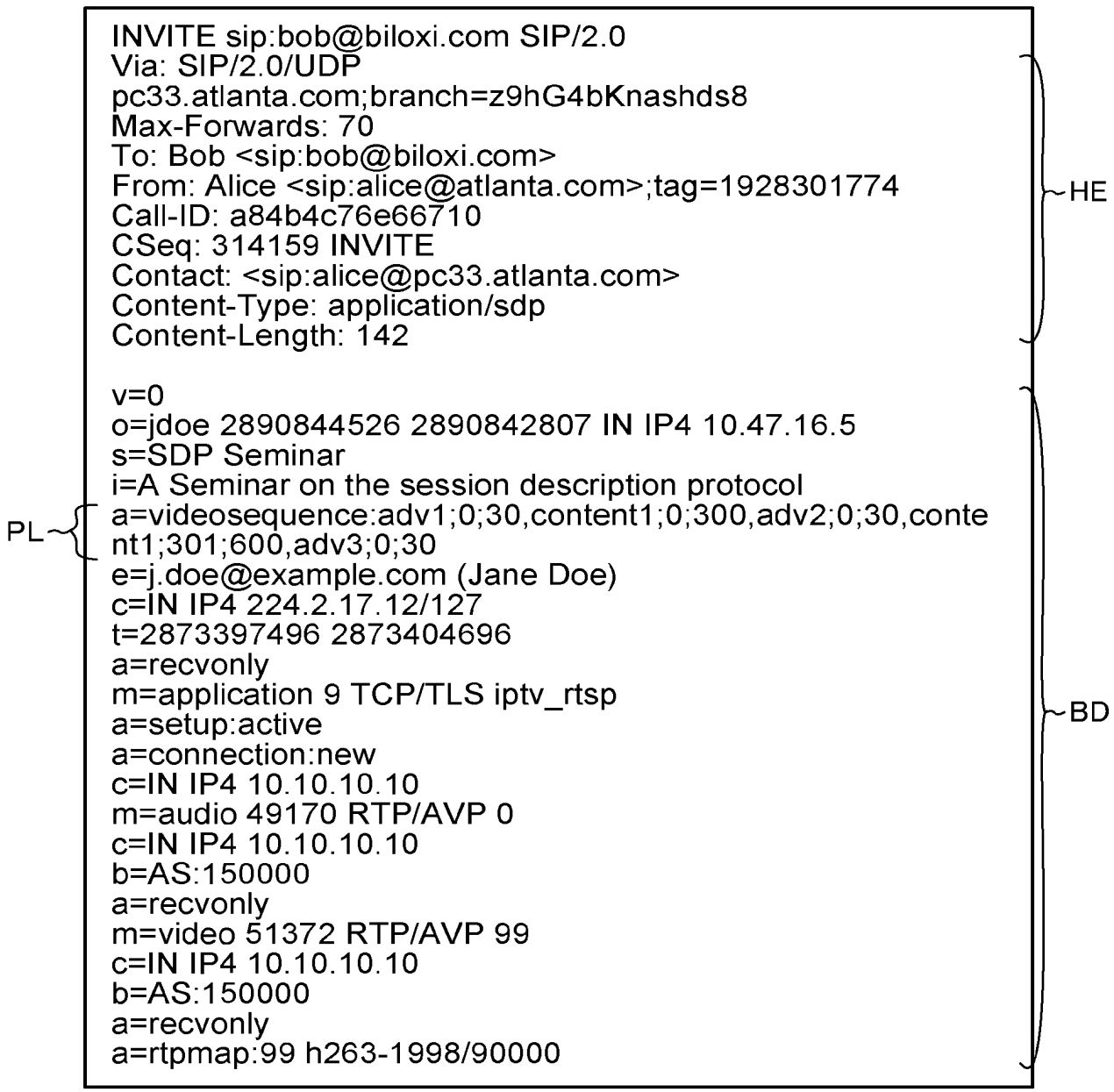
[図7]


INVITE sip:bob@biloxi.com SIP/2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
X-video-sequence: content1;0;300,adv1;0;30,content1;301;6
00,adv2;0;30,content1;601;900
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: application/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000
PL
HE
BD

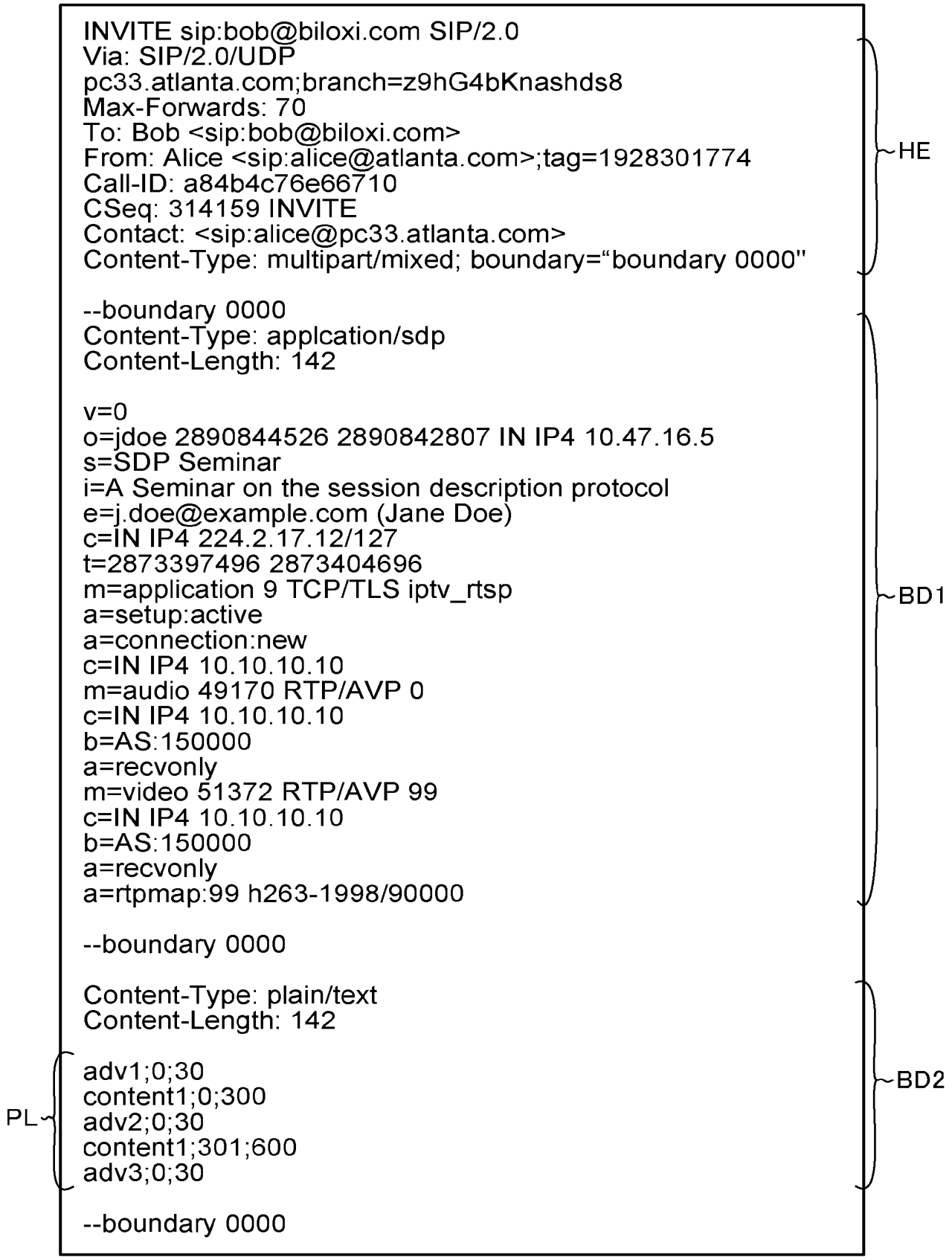
[図8]


PL
INVITE sip:content1@atlanta.com?seq=adv1+0+30+conten
t1+0+300+adv2+0+30+content1+301+600+adv3+0+30 SIP/
2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: application/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000

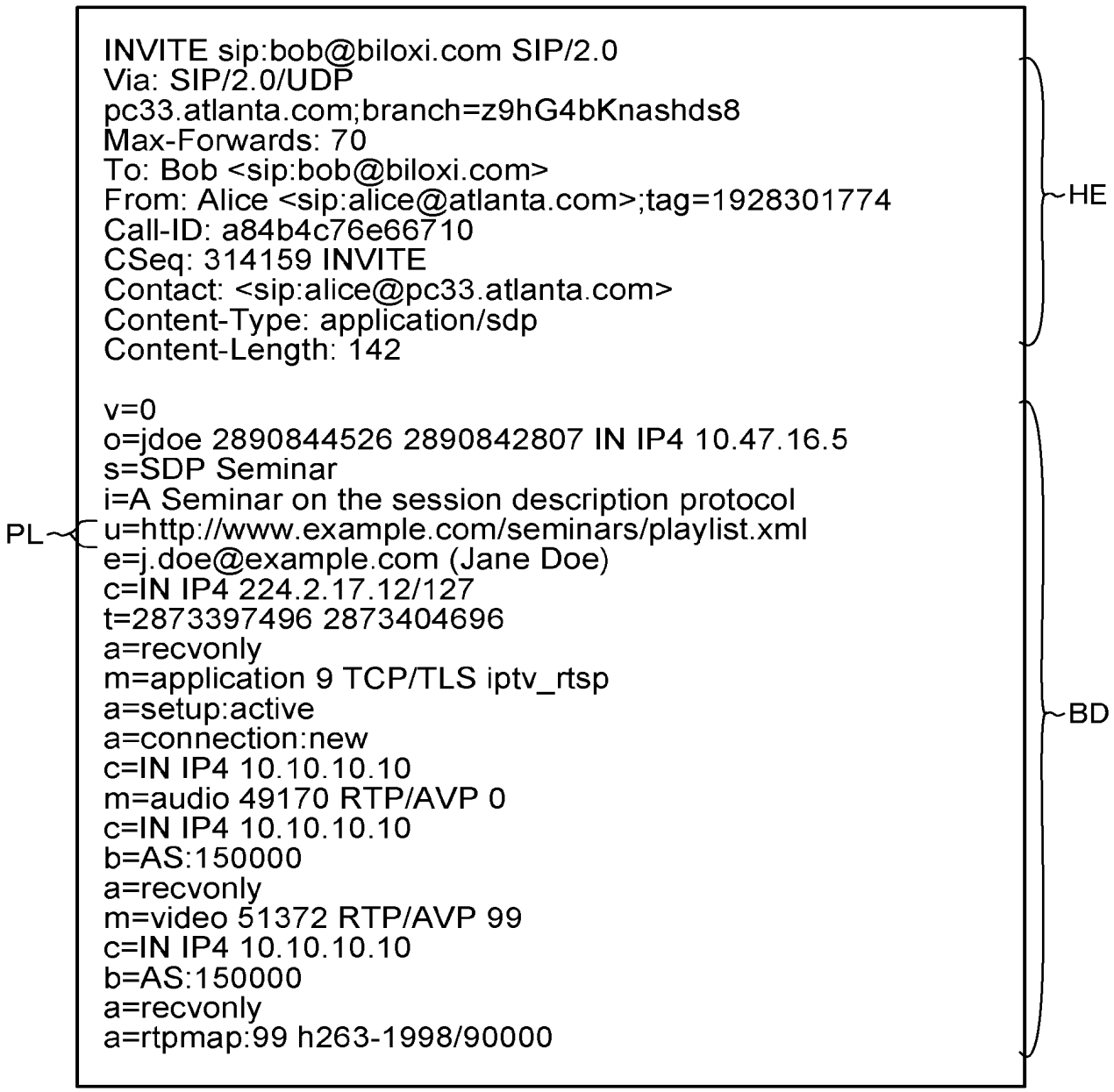
[図9]


INVITE sip:bob@biloxi.com SIP/2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: application/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
a=videosequence:adv1;0;30,content1;0;300,adv2;0;30,conte
nt1;301;600,adv3;0;30
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000
HE
PL
BD

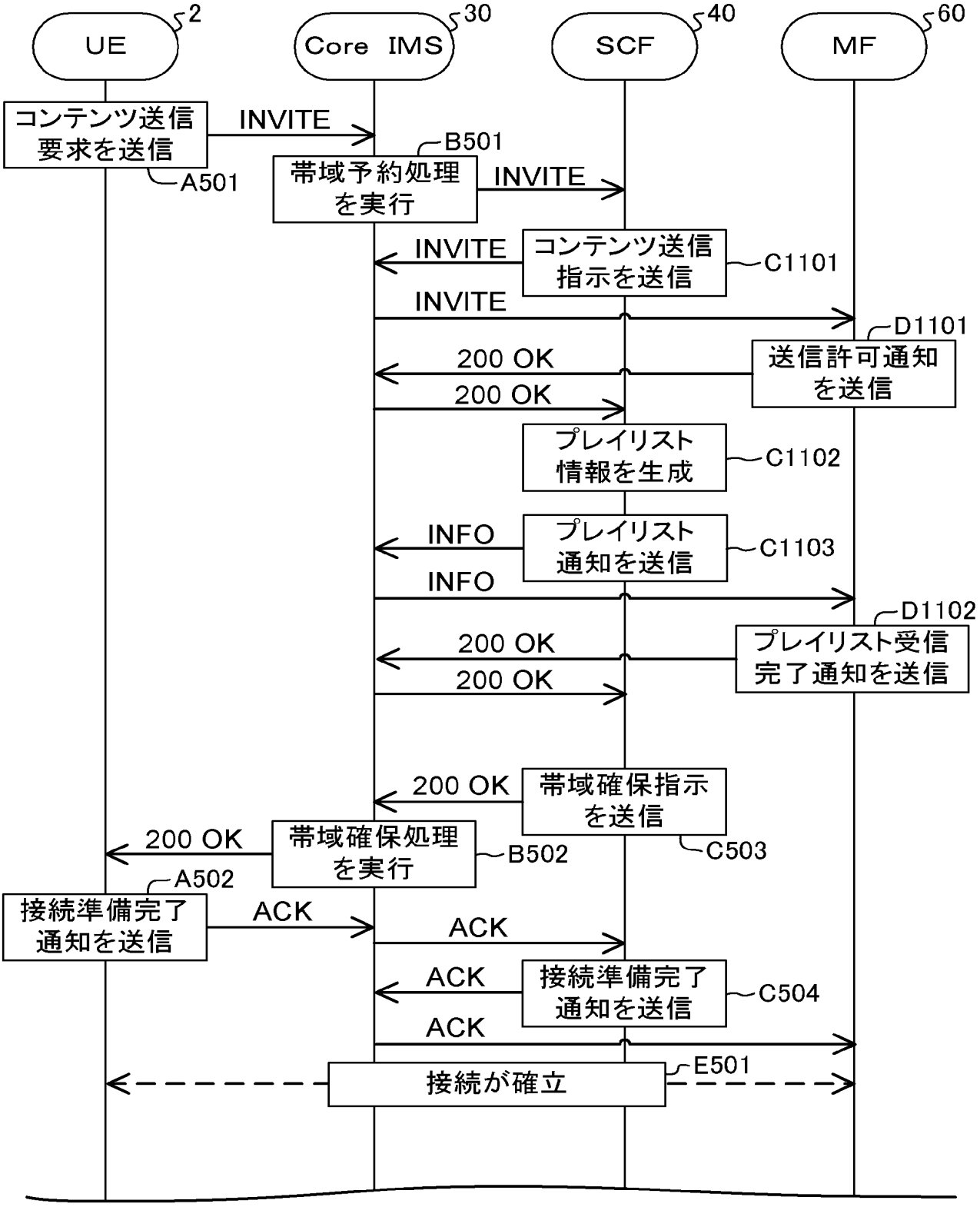
[図10]


INVITE sip:bob@biloxi.com SIP/2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: multipart/mixed; boundary="boundary 0000"
HE
--boundary 0000
Content-Type: applcation/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000
BD1
--boundary 0000
Content-Type: plain/text
Content-Length: 142
adv1;0;30
content1;0;300
adv2;0;30
content1;301;600
adv3;0;30
PL
BD2
--boundary 0000

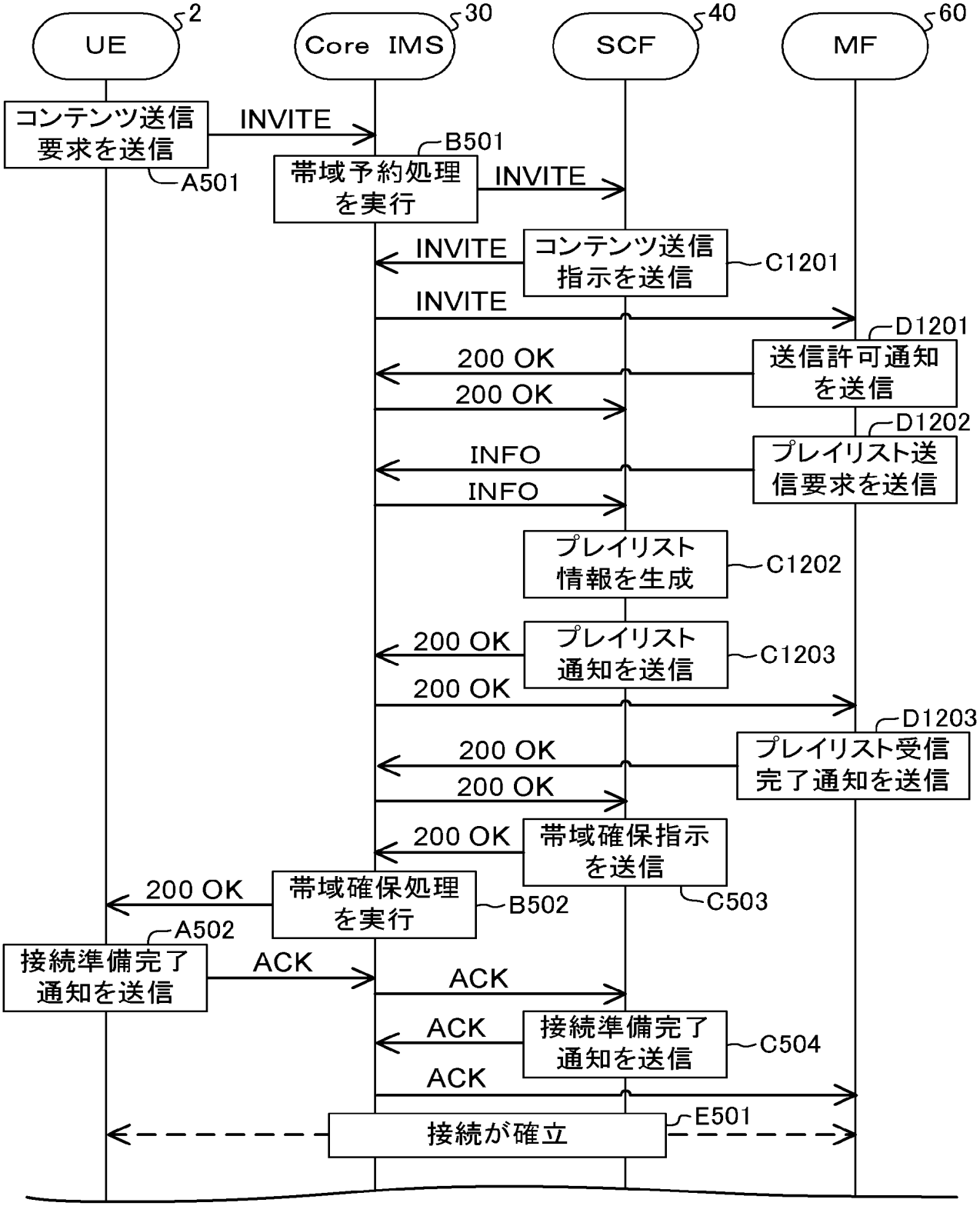
[図11]


INVITE sip:bob@biloxi.com SIP/2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: application/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
u=http://www.example.com/seminars/playlist.xml
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000
HE
PL
BD

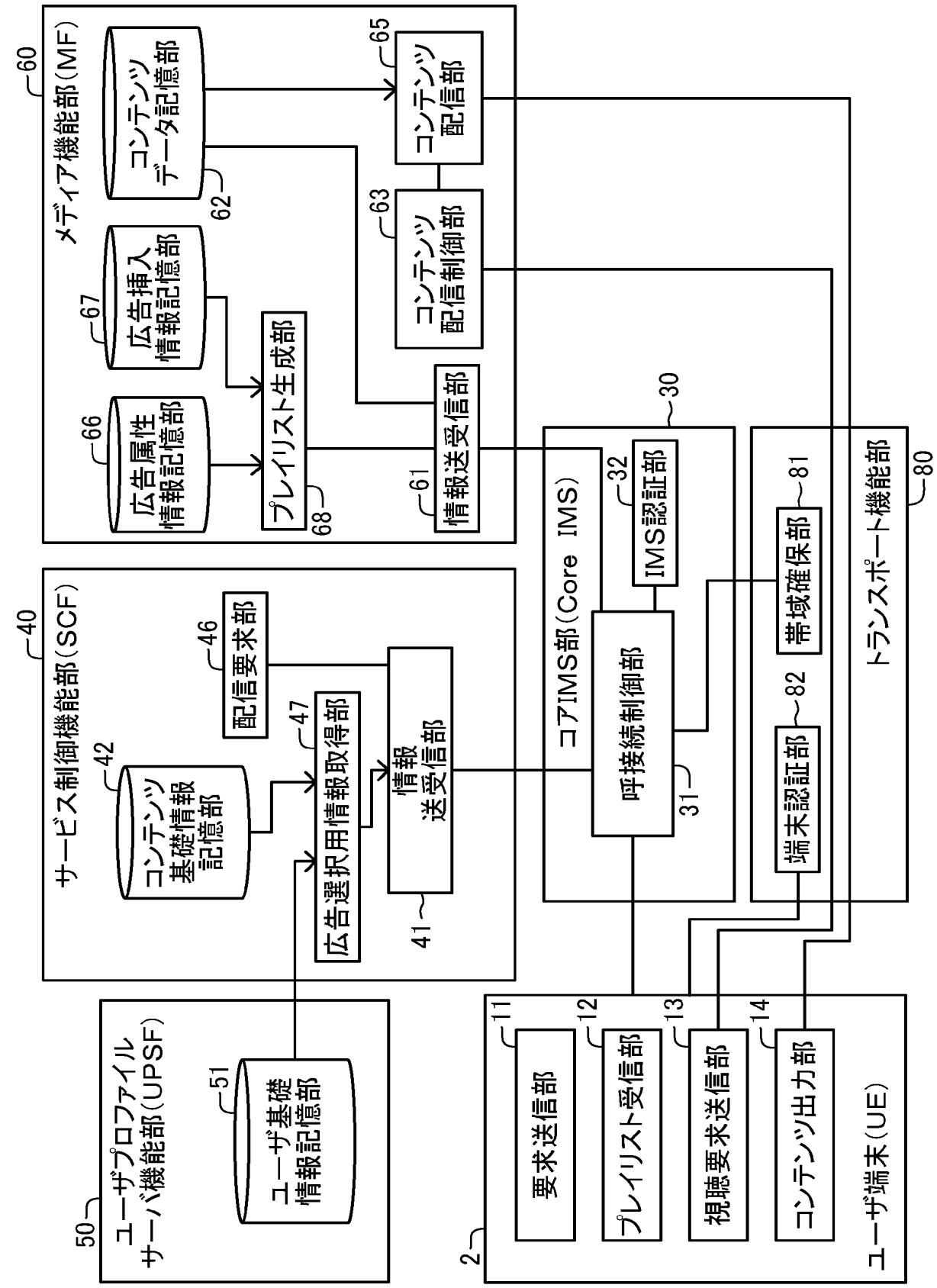
[図12]


UE
2
Core IMS
30
SCF
40
MF
60
コンテンツ送信
要求を送信
A501
INVITE
B501
帯域予約処理
を実行
INVITE
INVITE
コンテンツ送信
指示を送信
C1101
INVITE
D1101
送信許可通知
を送信
200 OK
200 OK
プレイリスト
情報を生成
C1102
INFO
プレイリスト
通知を送信
C1103
INFO
D1102
プレイリスト受信
完了通知を送信
200 OK
200 OK
200 OK
帯域確保指示
を送信
C503
200 OK
帯域確保処理
を実行
B502
A502
接続準備完了
通知を送信
ACK
ACK
ACK
接続準備完了
通知を送信
C504
ACK
E501
接続が確立

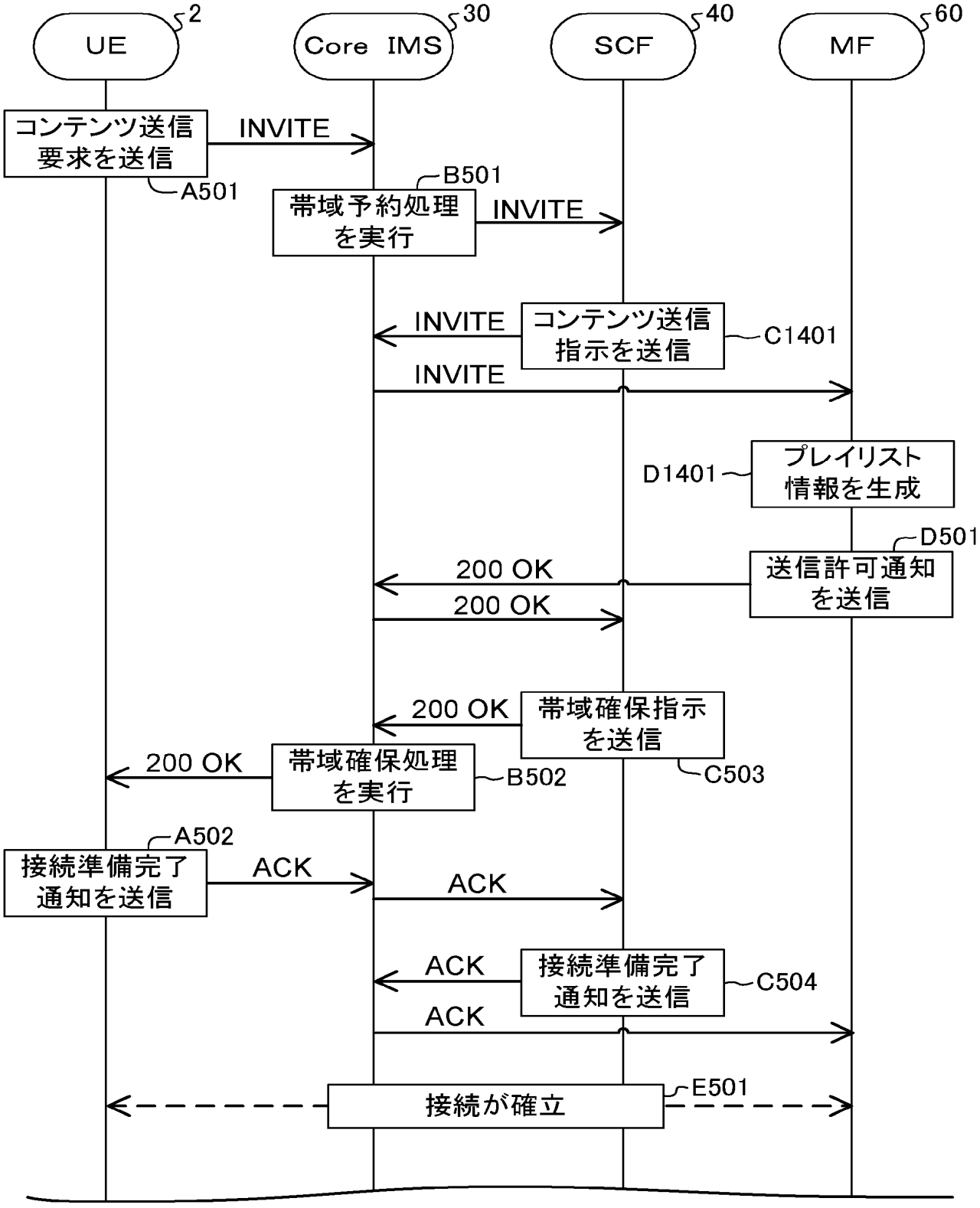
[図13]


UE
2
Core IMS
30
SCF
40
MF
60
コンテンツ送信要求を送信
A501
INVITE
B501
帯域予約処理を実行
INVITE
INVITE
コンテンツ送信指示を送信
C1201
INVITE
D1201
200 OK
送信許可通知を送信
200 OK
D1202
INFO
プレイリスト送信要求を送信
INFO
プレイリスト情報を生成
C1202
200 OK
プレイリスト通知を送信
C1203
200 OK
D1203
200 OK
プレイリスト受信完了通知を送信
200 OK
200 OK
帯域確保指示を送信
C503
200 OK
帯域確保処理を実行
B502
A502
接続準備完了通知を送信
ACK
ACK
ACK
接続準備完了通知を送信
C504
ACK
E501
接続が確立

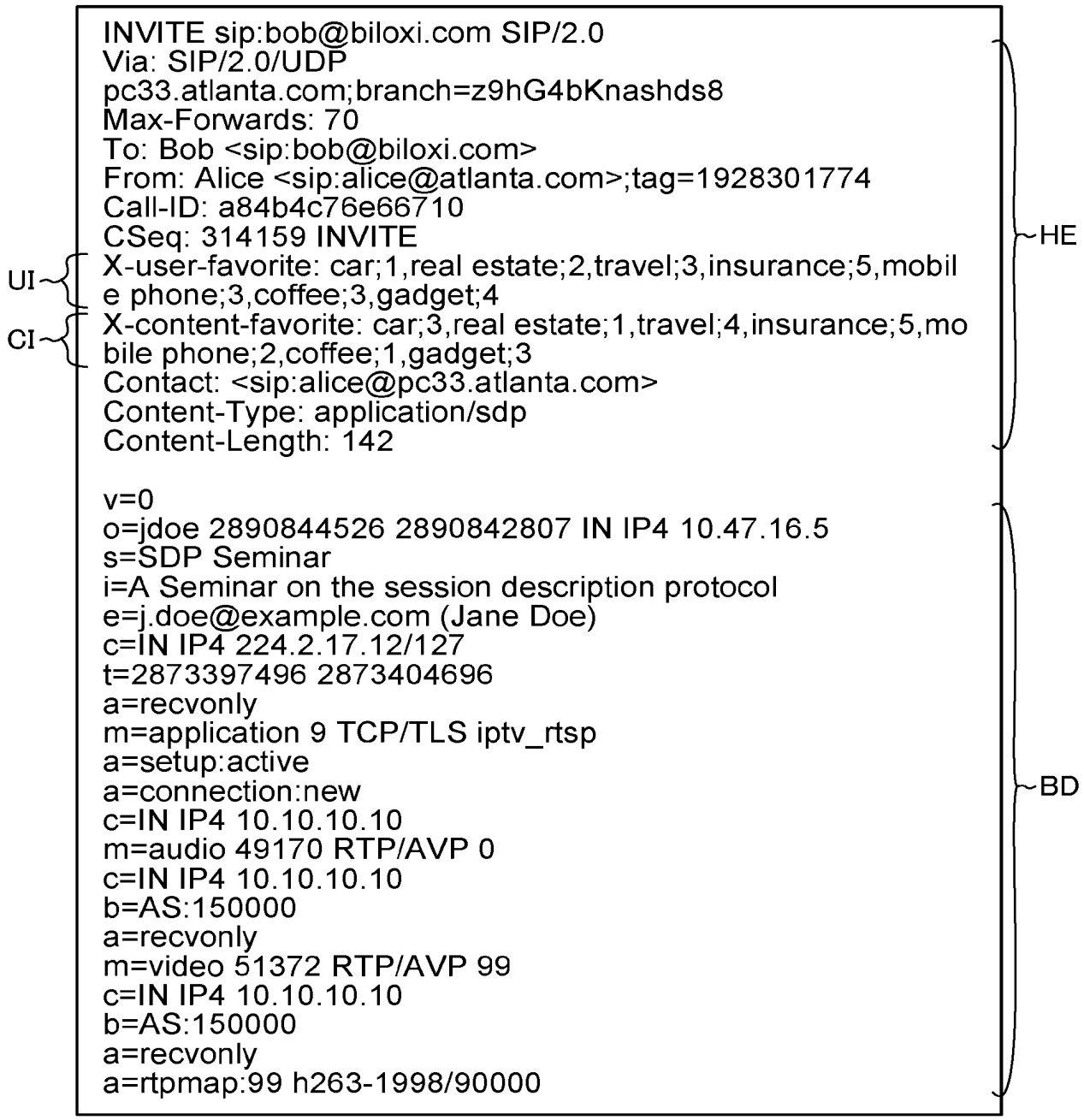
[図14]


メディア機能部(MF)
60
コンテンツデータ記憶部
62
広告挿入情報記憶部
67
広告属性情報記憶部
66
プレイリスト生成部
68
コンテンツ配信部
65
コンテンツ配信制御部
63
情報送受信部
61
サービス制御機能部(SCF)
40
配信要求部
46
コンテンツ基礎情報記憶部
42
広告選択用情報取得部
47
情報送受信部
41
コアIMS部(Core IMS)
30
IMS認証部
32
呼接続制御部
31
トランスポート機能部
80
帯域確保部
81
端末認証部
82
ユーザプロファイルサーバ機能部(UPSF)
50
ユーザ基礎情報記憶部
51
ユーザ端末(UE)
2
要求送信部
11
プレイリスト受信部
12
視聴要求送信部
13
コンテンツ出力部
14

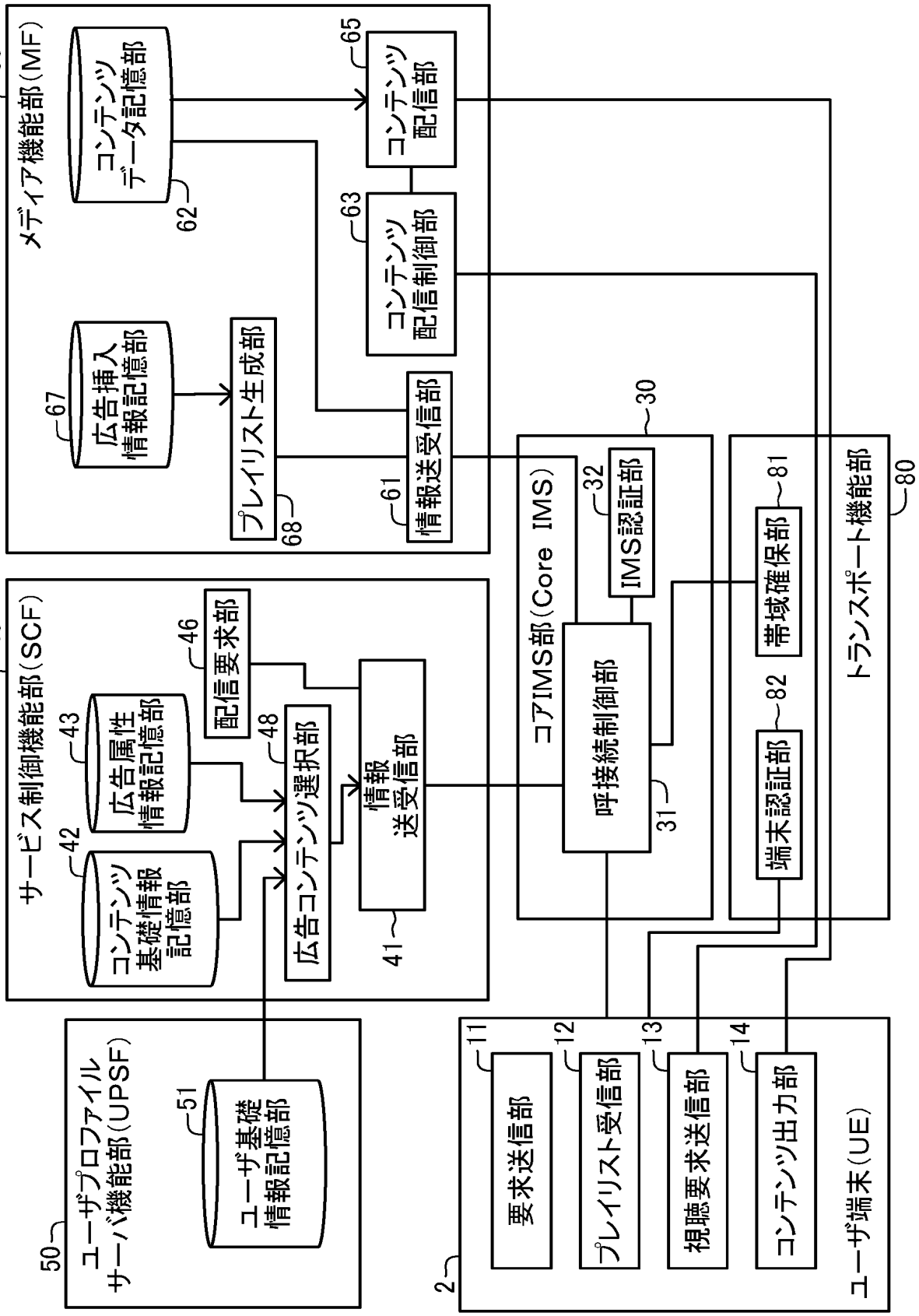
[図15]


UE
2
Core IMS
30
SCF
40
MF
60
コンテンツ送信
要求を送信
INVITE
A501
B501
帯域予約処理
を実行
INVITE
INVITE
コンテンツ送信
指示を送信
C1401
INVITE
D1401
プレイリスト
情報を生成
D501
200 OK
送信許可通知
を送信
200 OK
200 OK
帯域確保指示
を送信
C503
200 OK
帯域確保処理
を実行
B502
A502
接続準備完了
通知を送信
ACK
ACK
ACK
接続準備完了
通知を送信
C504
ACK
E501
接続が確立

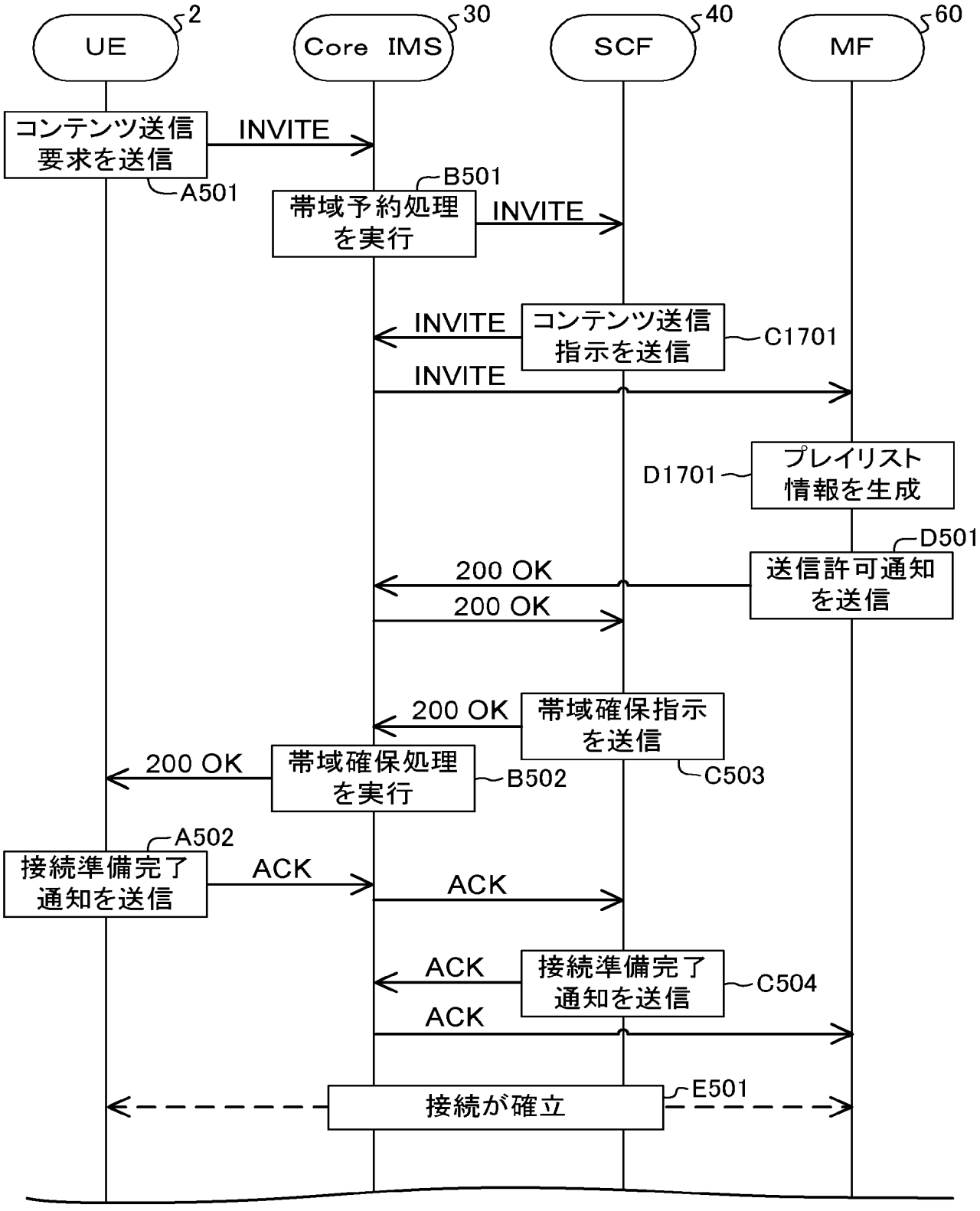
[図16]


INVITE sip:bob@biloxi.com SIP/2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
X-user-favorite: car;1,real estate;2,travel;3,insurance;5,mobil
e phone;3,coffee;3,gadget;4
X-content-favorite: car;3,real estate;1,travel;4,insurance;5,mo
bile phone;2,coffee;1,gadget;3
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: application/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000
UI
CI
HE
BD

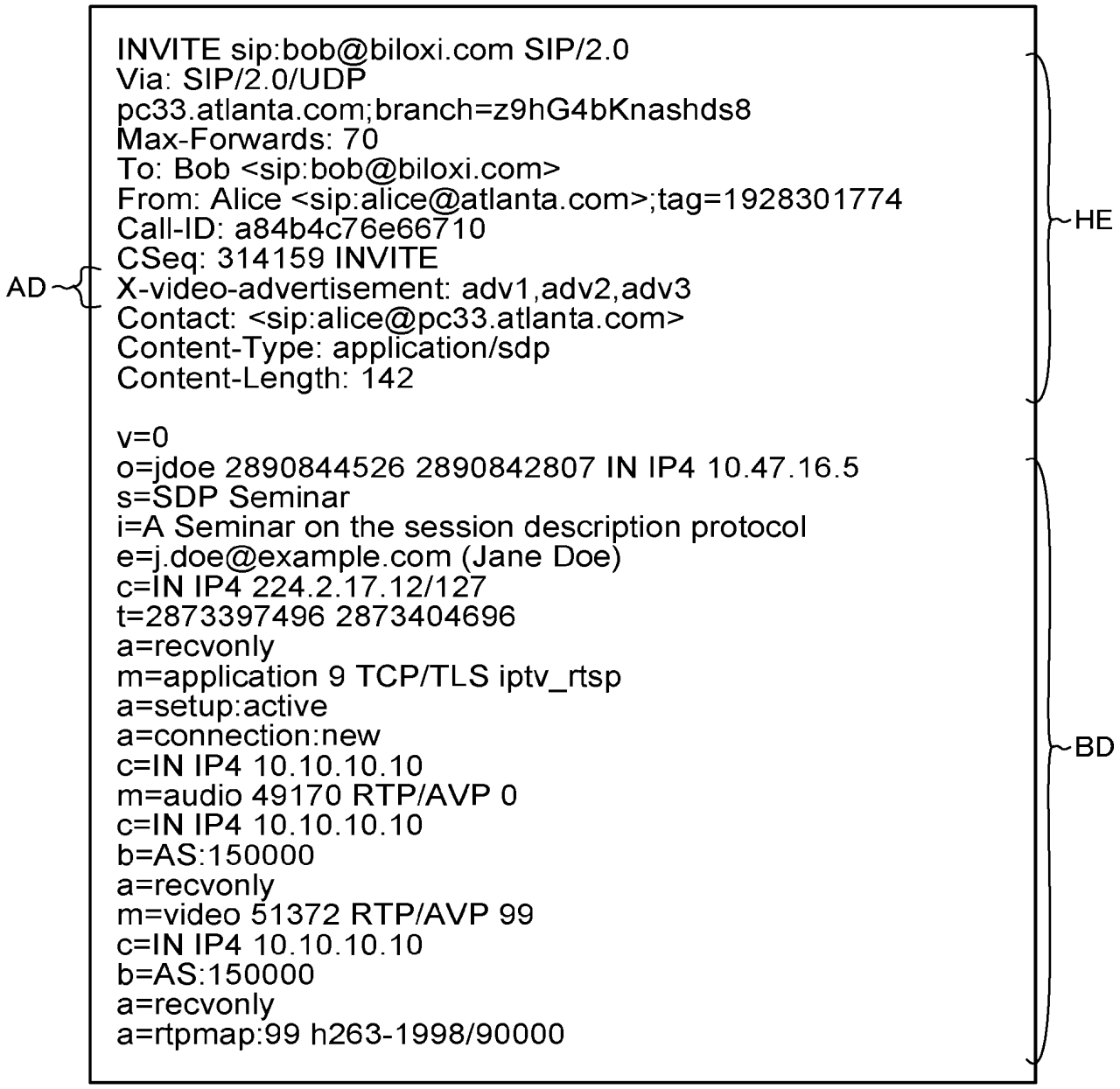
[図17]


60
メディア機能部(MF)
コンテンツ
データ記憶部
62
65
コンテンツ
配信部
63
コンテンツ
配信制御部
67
広告挿入
情報記憶部
プレイリスト生成部
68
61
情報送受信部
30
コアIMS部(Core IMS)
32
IMS認証部
呼接続制御部
31
81
帯域確保部
82
端末認証部
トランスポート機能部
80
40
サービス制御機能部(SCF)
46
配信要求部
43
広告属性
情報記憶部
48
広告コンテンツ選択部
42
コンテンツ
基礎情報
記憶部
情報
送受信部
41
50
ユーザプロファイル
サーバ機能部(UPSF)
51
ユーザ基礎
情報記憶部
2
11
要求送信部
12
プレイリスト受信部
13
視聴要求送信部
14
コンテンツ出力部
ユーザ端末(UE)

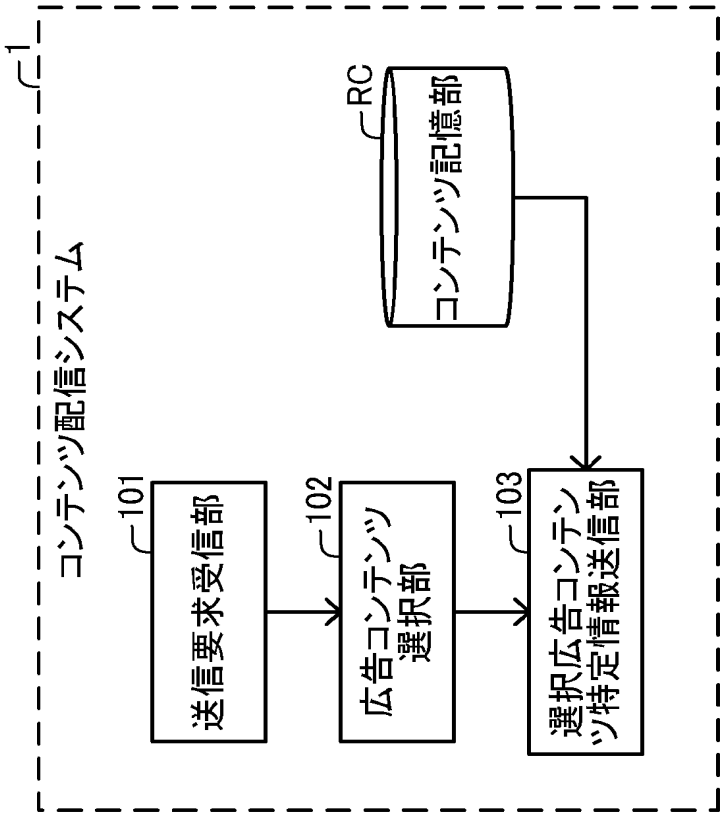
[図18]


UE
2
Core IMS
30
SCF
40
MF
60
コンテンツ送信
要求を送信
INVITE
A501
B501
帯域予約処理
を実行
INVITE
INVITE
コンテンツ送信
指示を送信
C1701
INVITE
D1701
プレイリスト
情報を生成
D501
200 OK
送信許可通知
を送信
200 OK
200 OK
帯域確保指示
を送信
C503
200 OK
帯域確保処理
を実行
B502
A502
接続準備完了
通知を送信
ACK
ACK
ACK
接続準備完了
通知を送信
C504
ACK
接続が確立
E501

[図19]


INVITE sip:bob@biloxi.com SIP/2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
X-video-advertisement: adv1,adv2,adv3
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: application/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000
HE
AD
BD

[図20]


1
コンテンツ配信システム
RC
コンテンツ記憶部
101
送信要求受信部
102
広告コンテンツ選択部
103
選択広告コンテンツ特定情報送信部

INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP2009/006140

A. CLASSIFICATION OF SUBJECT MATTER
G06F13/00(2006.01)i, *G06Q30/00*(2006.01)i, *H04N7/173*(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
G06F13/00, G06Q30/00, H04N7/173

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Jitsuyo Shinan Koho 1922-1996 Jitsuyo Shinan Toroku Koho 1996-2010
Kokai Jitsuyo Shinan Koho 1971-2010 Toroku Jitsuyo Shinan Koho 1994-2010

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2007/105568 A1 (Sony Corp.), 20 September 2007 (20.09.2007), paragraphs [0032] to [0051], [0221] to [0223], [0316] to [0319]; fig. 3 & JP 2007-272868 A & US 2009/0193469 A & EP 2000918 A1 & CN 101322109 A & KR 10-2008-0098650 A	1-23
Y	JP 2008-22298 A (Nippon Telegraph And Telephone Corp.), 31 January 2008 (31.01.2008), paragraphs [0080], [0125] to [0137]; fig. 16 (Family: none)	1-23

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
03 February, 2010 (03.02.10)	16 February, 2010 (16.02.10)
Name and mailing address of the ISA/ Japanese Patent Office	Authorized officer
Facsimile No.	Telephone No.

Peloton - Ex. 1002, Page 1111
IPR2023-01241 (Peloton v. NEC)

INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP2009/006140

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 2006-191594 A (Lucent Technologies Inc.), 20 July 2006 (20.07.2006), paragraphs [0056] to [0059]; fig. 2A & US 2006/0165059 A1 & EP 1677485 A1 & DE 602005001607 D & KR 10-2006-0079132 A & CN 1801862 A	7,8

国際調査報告

国際出願番号　ＰＣＴ／ＪＰ２００９／００６１４０

Ａ．　発明の属する分野の分類（国際特許分類（ＩＰＣ））

Int.Cl.　G06F13/00(2006.01)i, G06Q30/00(2006.01)i, H04N7/173(2006.01)i

Ｂ．　調査を行った分野

調査を行った最小限資料（国際特許分類（ＩＰＣ））

Int.Cl.　G06F13/00, G06Q30/00, H04N7/173

最小限資料以外の資料で調査を行った分野に含まれるもの

日本国実用新案公報	１９２２－１９９６年
日本国公開実用新案公報	１９７１－２０１０年
日本国実用新案登録公報	１９９６－２０１０年
日本国登録実用新案公報	１９９４－２０１０年

国際調査で使用した電子データベース（データベースの名称、調査に使用した用語）

Ｃ．　関連すると認められる文献

引用文献のカテゴリー＊	引用文献名　及び一部の箇所が関連するときは、その関連する箇所の表示	関連する請求項の番号
Y	WO 2007/105568 A1（ソニー株式会社）2007.09.20，段落【0032】-【0051】，【0221】-【0223】，【0316】-【0319】，図３ & JP 2007-272868 A & US 2009/0193469 A & EP 2000918 A1 & CN 101322109 A & KR 10-2008-0098650 A	1-23
Y	JP 2008-22298 A（日本電信電話株式会社）2008.01.31，段落【0080】，【0125】-【0137】，図16（ファミリーなし）	1-23

☑　Ｃ欄の続きにも文献が列挙されている。　　☐　パテントファミリーに関する別紙を参照。

＊　引用文献のカテゴリー
「Ａ」特に関連のある文献ではなく、一般的技術水準を示すもの
「Ｅ」国際出願日前の出願または特許であるが、国際出願日以後に公表されたもの
「Ｌ」優先権主張に疑義を提起する文献又は他の文献の発行日若しくは他の特別な理由を確立するために引用する文献（理由を付す）
「Ｏ」口頭による開示、使用、展示等に言及する文献
「Ｐ」国際出願日前で、かつ優先権の主張の基礎となる出願の日の後に公表された文献
「Ｔ」国際出願日又は優先日後に公表された文献であって出願と矛盾するものではなく、発明の原理又は理論の理解のために引用するもの
「Ｘ」特に関連のある文献であって、当該文献のみで発明の新規性又は進歩性がないと考えられるもの
「Ｙ」特に関連のある文献であって、当該文献と他の１以上の文献との、当業者にとって自明である組合せによって進歩性がないと考えられるもの
「＆」同一パテントファミリー文献

国際調査を完了した日 ０３．０２．２０１０	国際調査報告の発送日 １６．０２．２０１０
国際調査機関の名称及びあて先 日本国特許庁（ＩＳＡ／ＪＰ） 郵便番号１００－８９１５ 東京都千代田区霞が関三丁目４番３号	特許庁審査官（権限のある職員）　５Ｉ　９８５１ 寺谷　大亮 電話番号　０３－３５８１－１１０１　内線　３５６５

Peloton - Ex. 1002, Page 1113
IPR2023-01241 (Peloton v. NEC)

Ｃ（続き）．　関連すると認められる文献

引用文献のカテゴリー＊	引用文献名　及び一部の箇所が関連するときは、その関連する箇所の表示	関連する請求項の番号
Y	JP 2006-191594 A (ルーセント　テクノロジーズ　インコーポレーテッド) 2006.07.20, 段落【0056】-【0059】, 図 2A & US 2006/0165059 A1 & EP 1677485 A1 & DE 602005001607 D & KR 10-2006-0079132 A & CN 1801862 A	7,8

Peloton - Ex. 1002, Page 1114
IPR2023-01241 (Peloton v. NEC)

Document made available under the Patent Cooperation Treaty (PCT)

International application number: PCT/JP2009/006140

International filing date: 17 November 2009 (17.11.2009)

Document type: Certified copy of priority document

Document details: Country/Office: JP
Number: 2008-294270
Filing date: 18 November 2008 (18.11.2008)

Date of receipt at the International Bureau: 28 December 2009 (28.12.2009)

Remark: Priority document submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b)

World Intellectual Property Organization (WIPO) - Geneva, Switzerland
Organisation Mondiale de la Propriété Intellectuelle (OMPI) - Genève, Suisse

日 本 国 特 許 庁
JAPAN PATENT OFFICE

別紙添付の書類に記載されている事項は下記の出願書類に記載されている事項と同一であることを証明する。

This is to certify that the annexed is a true copy of the following application as filed with this Office.

出 願 年 月 日
Date of Application: ２００８年１１月１８日

出 願 番 号
Application Number: 特願２００８－２９４２７０

パリ条約による外国への出願に用いる優先権の主張の基礎となる出願の国コードと出願番号
The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is ＪＰ２００８－２９４２７０

出 願 人
Applicant(s): 日本電気株式会社

２００９年１２月 ８日

特許庁長官
Commissioner,
Japan Patent Office 細野哲弘

【書類名】　特許願
【整理番号】　32700369
【あて先】　特許庁長官　殿
【国際特許分類】　H04L 12/56
【発明者】
　【住所又は居所】　東京都港区芝五丁目７番１号　日本電気株式会社内
　【氏名】　谷口　邦弘
【発明者】
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　【氏名】　石川　和重
【発明者】
　【住所又は居所】　東京都港区芝五丁目７番１号　日本電気株式会社内
　【氏名】　浅見　和男
【特許出願人】
　【識別番号】　000004237
　【氏名又は名称】　日本電気株式会社
【代理人】
　【識別番号】　100124811
　【弁理士】
　【氏名又は名称】　馬場　資博
【手数料の表示】
　【予納台帳番号】　288354
　【納付金額】　15,000円
【提出物件の目録】
　【物件名】　特許請求の範囲　1
　【物件名】　明細書　1
　【物件名】　図面　1
　【物件名】　要約書　1
　【包括委任状番号】　0508846

【書類名】特許請求の範囲
【請求項１】
　アプリケーションサーバシステムと接続制御システムとを含み、
　前記接続制御システムは、ユーザ端末により送信された端末特定情報を受信し当該受信した端末特定情報に基づいて前記アプリケーションサーバシステムと当該ユーザ端末との間の接続を確立するように構成され、
　前記アプリケーションサーバシステムは、
　広告コンテンツを表す広告コンテンツデータ、及び、メインコンテンツを表すメインコンテンツデータ、を記憶するコンテンツ記憶手段と、
　前記メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つ前記ユーザ端末により送信されたコンテンツ送信要求を、前記接続制御システムを介して受信する送信要求受信手段と、
　前記広告コンテンツの属性を表す広告属性情報を含む広告選択用情報に基づいて、前記記憶されている広告コンテンツデータを選択する広告コンテンツ選択手段と、
　前記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、前記コンテンツ送信要求を送信してきた前記ユーザ端末へ、前記接続制御システムを介して送信する選択広告コンテンツ特定情報送信手段と、
　を備えるコンテンツ配信システム。
【請求項２】
　請求項１に記載のコンテンツ配信システムであって、
　前記ユーザ端末は、
　前記アプリケーションサーバシステムにより送信された前記選択広告コンテンツ特定情報を受信する選択広告コンテンツ特定情報受信手段と、
　前記アプリケーションサーバシステムとの間の接続が前記接続制御システムにより確立されている場合に、前記メインコンテンツ識別情報を含むメインコンテンツ視聴要求と、前記受信した選択広告コンテンツ特定情報を含む広告コンテンツ視聴要求と、を当該アプリケーションサーバシステムへ送信するコンテンツ視聴要求送信手段と、
　を備え、
　前記アプリケーションサーバシステムは、前記ユーザ端末により送信された前記メインコンテンツ視聴要求を受信し、当該受信したメインコンテンツ視聴要求に含まれるメインコンテンツ識別情報により識別されるメインコンテンツデータを当該ユーザ端末へ送信するとともに、当該ユーザ端末により送信された前記広告コンテンツ視聴要求を受信し、当該受信した広告コンテンツ視聴要求に含まれる選択広告コンテンツ特定情報により特定される広告コンテンツデータを当該ユーザ端末へ送信するコンテンツ送信手段を備えるコンテンツ配信システム。
【請求項３】
　請求項１又は請求項２に記載のコンテンツ配信システムであって、
　前記ユーザ端末は、前記アプリケーションサーバシステムにより送信されたメインコンテンツデータ及び広告コンテンツデータを受信し、当該受信したメインコンテンツデータ及び広告コンテンツデータに基づいて、当該メインコンテンツデータが表すメインコンテンツに当該広告コンテンツデータが表す広告コンテンツを挿入した視聴用コンテンツを出力するコンテンツ出力手段を備えるコンテンツ配信システム。
【請求項４】
　請求項１乃至請求項３のいずれか一項に記載のコンテンツ配信システムであって、
　前記選択広告コンテンツ特定情報送信手段は、前記コンテンツ送信要求に含まれる前記メインコンテンツ識別情報と、前記選択広告コンテンツ特定情報と、を含む情報であって、当該メインコンテンツ識別情報により識別されるメインコンテンツ及び当該選択広告コンテンツ特定情報により特定される広告コンテンツが出力される順序を表す情報を含む情報であるプレイリスト情報を、前記接続制御システムを介して、前記コンテンツ送信要求を送信してきた前記ユーザ端末へ送信するように構成され、

前記選択広告コンテンツ特定情報受信手段は、前記アプリケーションサーバシステムにより送信された前記プレイリスト情報を受信するように構成され、
前記コンテンツ視聴要求送信手段は、前記受信されたプレイリスト情報に基づいて、前記メインコンテンツ視聴要求及び前記広告コンテンツ視聴要求を前記アプリケーションサーバシステムへ送信するように構成されたコンテンツ配信システム。
【請求項５】
請求項１乃至請求項４のいずれか一項に記載のコンテンツ配信システムであって、
前記コンテンツ記憶手段は、前記広告コンテンツデータと、当該広告コンテンツデータが表す広告コンテンツの属性を表す広告属性情報と、を対応付けて記憶するように構成され、
前記広告選択用情報は、前記広告属性情報を特定するための情報であって前記ユーザ端末のユーザを識別するためのユーザ識別情報と対応付けられた情報であるユーザ基礎情報を含み、
前記広告コンテンツ選択手段は、前記コンテンツ送信要求を送信してきたユーザ端末のユーザを識別するためのユーザ識別情報と対応付けられたユーザ基礎情報により特定される広告属性情報と対応付けて記憶されている広告コンテンツデータを選択するように構成されたコンテンツ配信システム。
【請求項６】
請求項１乃至請求項５のいずれか一項に記載のコンテンツ配信システムであって、
前記コンテンツ記憶手段は、前記広告コンテンツデータと、当該広告コンテンツデータが表す広告コンテンツの属性を表す広告属性情報と、を対応付けて記憶するように構成され、
前記広告選択用情報は、前記広告属性情報を特定するための情報であって前記メインコンテンツを識別するメインコンテンツ識別情報と対応付けられた情報であるコンテンツ基礎情報を含み、
前記広告コンテンツ選択手段は、前記受信されたコンテンツ送信要求に含まれるメインコンテンツ識別情報と対応付けられたコンテンツ基礎情報により特定される広告属性情報と対応付けて記憶されている広告コンテンツデータを選択するように構成されたコンテンツ配信システム。
【請求項７】
請求項１乃至請求項６のいずれか一項に記載のコンテンツ配信システムであって、
前記選択広告コンテンツ特定情報送信手段は、前記接続制御システムが前記接続を確立するための処理を行う際に、前記選択広告コンテンツ特定情報を当該接続制御システムを介して前記ユーザ端末へ送信するように構成されたコンテンツ配信システム。
【請求項８】
請求項７に記載のコンテンツ配信システムであって、
前記接続制御システムは、前記ユーザ端末及び前記アプリケーションサーバシステムのそれぞれとの間で所定の接続確立用メッセージを授受することにより前記接続を確立するように構成され、
前記選択広告コンテンツ特定情報送信手段は、前記接続確立用メッセージに前記選択広告コンテンツ特定情報を含ませることにより、当該選択広告コンテンツ特定情報を当該接続制御システムを介して前記ユーザ端末へ送信するように構成されたコンテンツ配信システム。
【請求項９】
請求項１乃至請求項８のいずれか一項に記載のコンテンツ配信システムであって、
前記アプリケーションサーバシステムは、サービス制御サーバとメディアサーバとを含み、
前記サービス制御サーバは、前記送信要求受信手段、前記広告コンテンツ選択手段及び前記選択広告コンテンツ特定情報送信手段を備え、
前記メディアサーバは、前記コンテンツ記憶手段を備えるコンテンツ配信システム。

【請求項１０】
請求項１乃至請求項８のいずれか一項に記載のコンテンツ配信システムであって、
前記アプリケーションサーバシステムは、サービス制御サーバとメディアサーバとを含み、
前記サービス制御サーバは、前記送信要求受信手段を備え、
前記メディアサーバは、前記コンテンツ記憶手段、前記広告コンテンツ選択手段及び前記選択広告コンテンツ特定情報送信手段を備え、
前記サービス制御サーバは、前記広告選択用情報を、前記接続制御システムを介して前記メディアサーバへ送信する広告選択用情報送信手段を備え、
前記メディアサーバは、前記サービス制御サーバにより送信された前記広告選択用情報を受信する広告選択用情報受信手段を備え、
前記広告コンテンツ選択手段は、前記受信された広告選択用情報に基づいて、前記広告コンテンツデータを選択するように構成されたコンテンツ配信システム。
【請求項１１】
アプリケーションサーバシステムと接続制御システムとを含み、
前記接続制御システムは、ユーザ端末（Ｕｓｅｒ　Ｅｑｕｉｐｍｅｎｔ）により送信された端末特定情報を受信し当該受信した端末特定情報に基づいて前記アプリケーションサーバシステムと当該ユーザ端末との間の接続を確立するコアＩＭＳ部（Ｃｏｒｅ　ＩＭＳ（Ｉｎｔｅｒｎｅｔ　Ｐｒｏｔｏｃｏｌ　Ｍｕｌｔｉｍｅｄｉａ　Ｓｕｂｓｙｓｔｅｍ））を備え、
前記アプリケーションサーバシステムは、
前記コアＩＭＳ部により接続が確立された前記ユーザ端末へ、コンテンツを表すコンテンツデータを送信するメディア機能部（Ｍｅｄｉａ　Ｆｕｎｃｔｉｏｎｓ）と、
前記メディア機能部により提供されるサービスを制御するサービス制御機能部（Ｓｅｒｖｉｃｅ　Ｃｏｎｔｒｏｌ　Ｆｕｎｃｔｉｏｎｓ）と、
前記ユーザ端末のユーザのプロファイル情報を記憶するユーザプロファイルサーバ機能部（Ｕｓｅｒ　Ｐｒｏｆｉｌｅ　Ｓｅｒｖｅｒ　Ｆｕｎｃｔｉｏｎｓ）と、を備え、
前記メディア機能部は、
広告コンテンツを表す広告コンテンツデータ、及び、メインコンテンツを表すメインコンテンツデータ、を記憶するコンテンツ記憶手段を備え、
前記サービス制御機能部は、
前記メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つ前記ユーザ端末により送信されたコンテンツ送信要求を、前記コアＩＭＳ部を介して受信する送信要求受信手段と、
前記広告コンテンツの属性を表す広告属性情報を含み、且つ、前記ユーザプロファイルサーバ機能部、前記サービス制御機能部又は前記接続制御システムにより予め記憶された広告選択用情報に基づいて、前記記憶されている広告コンテンツデータを選択する広告コンテンツ選択手段と、
前記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、前記コンテンツ送信要求を送信してきた前記ユーザ端末へ、前記コアＩＭＳ部を介して送信する選択広告コンテンツ特定情報送信手段と、
を備えるコンテンツ配信システム。
【請求項１２】
請求項１１に記載のコンテンツ配信システムであって、
前記ユーザ端末は、
前記サービス制御機能部により送信された前記選択広告コンテンツ特定情報を受信する選択広告コンテンツ特定情報受信手段と、
前記メディア機能部との間の接続が前記コアＩＭＳ部により確立されている場合に、前記メインコンテンツ識別情報を含むメインコンテンツ視聴要求と、前記受信した選択広告コンテンツ特定情報を含む広告コンテンツ視聴要求と、を当該メディア機能部へ送信する

コンテンツ視聴要求送信手段と、
を備え、
前記メディア機能部は、前記ユーザ端末により送信された前記メインコンテンツ視聴要求を受信し、当該受信したメインコンテンツ視聴要求に含まれるメインコンテンツ識別情報により識別されるメインコンテンツデータを当該ユーザ端末へ送信するとともに、当該ユーザ端末により送信された前記広告コンテンツ視聴要求を受信し、当該受信した広告コンテンツ視聴要求に含まれる選択広告コンテンツ特定情報により特定される広告コンテンツデータを当該ユーザ端末へ送信するコンテンツ送信手段を備えるコンテンツ配信システム。
【請求項１３】
請求項１１又は請求項１２に記載のコンテンツ配信システムであって、
前記ユーザ端末は、前記メディア機能部により送信されたメインコンテンツデータ及び広告コンテンツデータを受信し、当該受信したメインコンテンツデータ及び広告コンテンツデータに基づいて、当該メインコンテンツデータが表すメインコンテンツに当該広告コンテンツデータが表す広告コンテンツを挿入した視聴用コンテンツを出力するコンテンツ出力手段を備えるコンテンツ配信システム。
【請求項１４】
請求項１１乃至請求項１３のいずれか一項に記載のコンテンツ配信システムであって、
前記選択広告コンテンツ特定情報送信手段は、前記コンテンツ送信要求に含まれる前記メインコンテンツ識別情報と、前記選択広告コンテンツ特定情報と、を含む情報であって、当該メインコンテンツ識別情報により識別されるメインコンテンツ及び当該選択広告コンテンツ特定情報により特定される広告コンテンツが出力される順序を表す情報を含む情報であるプレイリスト情報を、前記コアＩＭＳ部を介して、前記コンテンツ送信要求を送信してきた前記ユーザ端末へ送信するように構成され、
前記選択広告コンテンツ特定情報受信手段は、前記サービス制御機能部により送信された前記プレイリスト情報を受信するように構成され、
前記コンテンツ視聴要求送信手段は、前記受信されたプレイリスト情報に基づいて、前記メインコンテンツ視聴要求及び前記広告コンテンツ視聴要求を前記メディア機能部へ送信するように構成されたコンテンツ配信システム。
【請求項１５】
広告コンテンツを表す広告コンテンツデータ、及び、メインコンテンツを表すメインコンテンツデータ、を記憶装置に記憶させるコンテンツ記憶処理工程と、
接続制御システムが、ユーザ端末により送信された端末特定情報を受信し当該受信した端末特定情報に基づいてアプリケーションサーバシステムと当該ユーザ端末との間の接続を確立する接続確立工程と、
前記アプリケーションサーバシステムが、前記メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つ前記ユーザ端末により送信されたコンテンツ送信要求を、前記接続制御システムを介して受信する送信要求受信工程と、
前記広告コンテンツの属性を表す広告属性情報を含む広告選択用情報に基づいて、前記記憶されている広告コンテンツデータを選択する広告コンテンツ選択工程と、
前記アプリケーションサーバシステムが、前記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、前記コンテンツ送信要求を送信してきた前記ユーザ端末へ、前記接続制御システムを介して送信する選択広告コンテンツ特定情報送信工程と、
を含むコンテンツ配信方法。
【請求項１６】
請求項１５に記載のコンテンツ配信方法であって、
前記ユーザ端末が、前記アプリケーションサーバシステムにより送信された前記選択広告コンテンツ特定情報を受信する選択広告コンテンツ特定情報受信工程と、
前記ユーザ端末と前記アプリケーションサーバシステムとの間の接続が前記接続制御シ

ステムにより確立されている場合に、当該ユーザ端末が、前記メインコンテンツ識別情報を含むメインコンテンツ視聴要求と、前記受信した選択広告コンテンツ特定情報を含む広告コンテンツ視聴要求と、を当該アプリケーションサーバシステムへ送信するコンテンツ視聴要求送信工程と、
前記アプリケーションサーバシステムが、前記ユーザ端末により送信された前記メインコンテンツ視聴要求を受信し、当該受信したメインコンテンツ視聴要求に含まれるメインコンテンツ識別情報により識別されるメインコンテンツデータを当該ユーザ端末へ送信するとともに、当該ユーザ端末により送信された前記広告コンテンツ視聴要求を受信し、当該受信した広告コンテンツ視聴要求に含まれる選択広告コンテンツ特定情報により特定される広告コンテンツデータを当該ユーザ端末へ送信するコンテンツ送信工程と、
を含むコンテンツ配信方法。
【請求項１７】
請求項１５又は請求項１６に記載のコンテンツ配信方法であって、
前記ユーザ端末が、前記アプリケーションサーバシステムにより送信されたメインコンテンツデータ及び広告コンテンツデータを受信し、当該受信したメインコンテンツデータ及び広告コンテンツデータに基づいて、当該メインコンテンツデータが表すメインコンテンツに当該広告コンテンツデータが表す広告コンテンツを挿入した視聴用コンテンツを出力するコンテンツ出力工程を含むコンテンツ配信方法。
【請求項１８】
請求項１５乃至請求項１７のいずれか一項に記載のコンテンツ配信方法であって、
前記選択広告コンテンツ特定情報送信工程は、前記コンテンツ送信要求に含まれる前記メインコンテンツ識別情報と、前記選択広告コンテンツ特定情報と、を含む情報であって、当該メインコンテンツ識別情報により識別されるメインコンテンツ及び当該選択広告コンテンツ特定情報により特定される広告コンテンツが出力される順序を表す情報を含む情報であるプレイリスト情報を、前記接続制御システムを介して、前記コンテンツ送信要求を送信してきた前記ユーザ端末へ送信するように構成され、
前記選択広告コンテンツ特定情報受信工程は、前記アプリケーションサーバシステムにより送信された前記プレイリスト情報を受信するように構成され、
前記コンテンツ視聴要求送信工程は、前記受信されたプレイリスト情報に基づいて、前記メインコンテンツ視聴要求及び前記広告コンテンツ視聴要求を前記アプリケーションサーバシステムへ送信するように構成されたコンテンツ配信方法。
【請求項１９】
サービス制御サーバに、
メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つユーザ端末により送信されたコンテンツ送信要求を、メディアサーバと当該ユーザ端末との間の接続を確立する接続制御システムを介して受信する送信要求受信手段と、
広告コンテンツの属性を表す広告属性情報を含む広告選択用情報に基づいて、予め記憶装置に記憶されている広告コンテンツデータを選択する広告コンテンツ選択手段と、
前記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、前記コンテンツ送信要求を送信してきた前記ユーザ端末へ、前記接続制御システムを介して送信する選択広告コンテンツ特定情報送信手段と、
を実現させるためのプログラム。
【請求項２０】
請求項１９に記載のプログラムであって、
前記選択広告コンテンツ特定情報送信手段は、前記コンテンツ送信要求に含まれる前記メインコンテンツ識別情報と、前記選択広告コンテンツ特定情報と、を含む情報であって、当該メインコンテンツ識別情報により識別されるメインコンテンツ及び当該選択広告コンテンツ特定情報により特定される広告コンテンツが出力される順序を表す情報を含む情報であるプレイリスト情報を、前記コンテンツ送信要求を送信してきた前記ユーザ端末へ、前記接続制御システムを介して送信するように構成されたプログラム。

【請求項２１】
ユーザ端末に、
選択された広告コンテンツデータを特定する情報であって、アプリケーションサーバシステムにより送信された情報である選択広告コンテンツ特定情報を、当該アプリケーションサーバシステムと当該ユーザ端末との間の接続を確立する接続制御システムを介して受信する選択広告コンテンツ特定情報受信手段と、
前記アプリケーションサーバシステムとの間の接続が前記接続制御システムにより確立されている場合に、メインコンテンツを識別するためのメインコンテンツ識別情報を含むメインコンテンツ視聴要求と、前記受信した選択広告コンテンツ特定情報を含む広告コンテンツ視聴要求と、を当該アプリケーションサーバシステムへ送信するコンテンツ視聴要求送信手段と、
を実現させるためのプログラム。
【請求項２２】
請求項２１に記載のプログラムであって、
前記ユーザ端末に、更に、
前記アプリケーションサーバシステムにより送信されたメインコンテンツデータ及び広告コンテンツデータを受信し、当該受信したメインコンテンツデータ及び広告コンテンツデータに基づいて、当該メインコンテンツデータが表すメインコンテンツに当該広告コンテンツデータが表す広告コンテンツを挿入した視聴用コンテンツを出力するコンテンツ出力手段を実現させるためのプログラム。
【請求項２３】
請求項２１又は請求項２２に記載のプログラムであって、
前記選択広告コンテンツ特定情報受信手段は、前記メインコンテンツ識別情報と、前記選択広告コンテンツ特定情報と、を含む情報であって、当該メインコンテンツ識別情報により識別されるメインコンテンツ及び当該選択広告コンテンツ特定情報により特定される広告コンテンツが出力される順序を表す情報を含む情報であって、前記アプリケーションサーバシステムにより送信された情報であるプレイリスト情報を受信するように構成され、
前記コンテンツ視聴要求送信手段は、前記受信されたプレイリスト情報に基づいて、前記メインコンテンツ視聴要求及び前記広告コンテンツ視聴要求を前記アプリケーションサーバシステムへ送信するように構成されたプログラム。

【書類名】明細書
【発明の名称】コンテンツ配信システム
【技術分野】
【０００１】
本発明は、コンテンツを表すコンテンツデータをユーザ端末へ送信するコンテンツ配信システムに関する。
【背景技術】
【０００２】
コンテンツ送信装置と、コンテンツ受信装置と、接続制御装置（ＳＩＰ（Ｓｅｓｓｉｏｎ　Ｉｎｉｔｉａｔｉｏｎ　Ｐｒｏｔｏｃｏｌ）サーバ）と、を含むコンテンツ配信システムが知られている。
【０００３】
このコンテンツ配信システムにおいて、コンテンツ受信装置は、接続制御装置へコンテンツ送信要求を送信する。接続制御装置は、コンテンツ送信要求に応じて、コンテンツ送信指示をコンテンツ送信装置へ送信するとともに、コンテンツ送信装置とコンテンツ受信装置との間の接続（セッション）を確立する。更に、コンテンツ配信システムは、コンテンツ送信装置とコンテンツ受信装置との間の通信経路の通信帯域を予約する処理を行う。そして、コンテンツ送信装置は、接続制御装置により接続が確立された場合に、予め記憶されたコンテンツデータをコンテンツ受信装置へ送信する。
【０００４】
このコンテンツ配信システムによれば、コンテンツ送信装置とコンテンツ受信装置との間の通信経路の通信帯域が確保されるので、コンテンツ送信装置からコンテンツ受信装置へコンテンツデータを送信する際の通信品質が低下することを防止することができる。
【特許文献１】特開２００８－１５３８９６号公報
【発明の開示】
【発明が解決しようとする課題】
【０００５】
ところで、上記コンテンツ配信システムにおいて、コンテンツ送信装置は、予め記憶されたコンテンツデータをコンテンツ受信装置からの要求に応じて送信する。
【０００６】
従って、コンテンツ受信装置のユーザが視聴することを希望するメインコンテンツ（視聴希望コンテンツ）に、広告コンテンツを挿入した視聴用コンテンツを、そのユーザに視聴させるためには、コンテンツ送信装置がその視聴用コンテンツを表す視聴用コンテンツデータを予め記憶しておくように上記コンテンツ配信システムを構成することが好適であると考えられる。
【０００７】
しかしながら、このように構成されたコンテンツ配信システムであっても、視聴希望コンテンツ及び／又はユーザに応じて、メインコンテンツに挿入される広告コンテンツを変更することができない。即ち、上記コンテンツ配信システムによれば、視聴希望コンテンツ及び／又はユーザに応じた広告コンテンツをユーザに視聴させることができないという問題があった。
【０００８】
このため、本発明の目的は、上述した課題である「視聴希望コンテンツ及び／又はユーザに応じた広告コンテンツをユーザに視聴させることができないこと」を解決することが可能なコンテンツ配信システムを提供することにある。
【課題を解決するための手段】
【０００９】
かかる目的を達成するため本発明の一形態であるコンテンツ配信システムは、
アプリケーションサーバシステムと接続制御システムとを含み、
上記接続制御システムは、ユーザ端末により送信された端末特定情報を受信し当該受信

した端末特定情報に基づいて上記アプリケーションサーバシステムと当該ユーザ端末との間の接続を確立するように構成され、
上記アプリケーションサーバシステムは、
広告コンテンツを表す広告コンテンツデータ、及び、メインコンテンツを表すメインコンテンツデータ、を記憶するコンテンツ記憶手段と、
上記メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つ上記ユーザ端末により送信されたコンテンツ送信要求を、上記接続制御システムを介して受信する送信要求受信手段と、
上記広告コンテンツの属性を表す広告属性情報を含む広告選択用情報に基づいて、上記記憶されている広告コンテンツデータを選択する広告コンテンツ選択手段と、
上記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ、上記接続制御システムを介して送信する選択広告コンテンツ特定情報送信手段と、
を備える。
【００１０】
また、本発明の他の形態であるコンテンツ配信システムは、
アプリケーションサーバシステムと接続制御システムとを含み、
上記接続制御システムは、ユーザ端末（Ｕｓｅｒ　Ｅｑｕｉｐｍｅｎｔ）により送信された端末特定情報を受信し当該受信した端末特定情報に基づいて上記アプリケーションサーバシステムと当該ユーザ端末との間の接続を確立するコアＩＭＳ部（Ｃｏｒｅ　ＩＭＳ（Ｉｎｔｅｒｎｅｔ　Ｐｒｏｔｏｃｏｌ　Ｍｕｌｔｉｍｅｄｉａ　Ｓｕｂｓｙｓｔｅｍ））を備え、
上記アプリケーションサーバシステムは、
上記コアＩＭＳ部により接続が確立された上記ユーザ端末へ、コンテンツを表すコンテンツデータを送信するメディア機能部（Ｍｅｄｉａ　Ｆｕｎｃｔｉｏｎｓ）と、
上記メディア機能部により提供されるサービスを制御するサービス制御機能部（Ｓｅｒｖｉｃｅ　Ｃｏｎｔｒｏｌ　Ｆｕｎｃｔｉｏｎｓ）と、
上記ユーザ端末のユーザのプロファイル情報を記憶するユーザプロファイルサーバ機能部（Ｕｓｅｒ　Ｐｒｏｆｉｌｅ　Ｓｅｒｖｅｒ　Ｆｕｎｃｔｉｏｎｓ）と、を備え、
上記メディア機能部は、
広告コンテンツを表す広告コンテンツデータ、及び、メインコンテンツを表すメインコンテンツデータ、を記憶するコンテンツ記憶手段を備え、
上記サービス制御機能部は、
上記メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つ上記ユーザ端末により送信されたコンテンツ送信要求を、上記コアＩＭＳ部を介して受信する送信要求受信手段と、
上記広告コンテンツの属性を表す広告属性情報を含み、且つ、上記ユーザプロファイルサーバ機能部、上記サービス制御機能部又は上記接続制御システムにより予め記憶された広告選択用情報に基づいて、上記記憶されている広告コンテンツデータを選択する広告コンテンツ選択手段と、
上記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ、上記コアＩＭＳ部を介して送信する選択広告コンテンツ特定情報送信手段と、
を備える。
【００１１】
また、本発明の他の形態であるコンテンツ配信方法は、
広告コンテンツを表す広告コンテンツデータ、及び、メインコンテンツを表すメインコンテンツデータ、を記憶装置に記憶させるコンテンツ記憶処理工程と、
接続制御システムが、ユーザ端末により送信された端末特定情報を受信し当該受信した端末特定情報に基づいてアプリケーションサーバシステムと当該ユーザ端末との間の接続

を確立する接続確立工程と、
上記アプリケーションサーバシステムが、上記メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つ上記ユーザ端末により送信されたコンテンツ送信要求を、上記接続制御システムを介して受信する送信要求受信工程と、
上記広告コンテンツの属性を表す広告属性情報を含む広告選択用情報に基づいて、上記記憶されている広告コンテンツデータを選択する広告コンテンツ選択工程と、
上記アプリケーションサーバシステムが、上記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ、上記接続制御システムを介して送信する選択広告コンテンツ特定情報送信工程と、
を含む。
【００１２】
また、本発明の他の形態であるプログラムは、
サービス制御サーバに、
メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つユーザ端末により送信されたコンテンツ送信要求を、メディアサーバと当該ユーザ端末との間の接続を確立する接続制御システムを介して受信する送信要求受信手段と、
広告コンテンツの属性を表す広告属性情報を含む広告選択用情報に基づいて、予め記憶装置に記憶されている広告コンテンツデータを選択する広告コンテンツ選択手段と、
上記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ、上記接続制御システムを介して送信する選択広告コンテンツ特定情報送信手段と、
を実現させるためのプログラムである。
【００１３】
また、本発明の他の形態であるプログラムは、
ユーザ端末に、
選択された広告コンテンツデータを特定する情報であって、アプリケーションサーバシステムにより送信された情報である選択広告コンテンツ特定情報を、当該アプリケーションサーバシステムと当該ユーザ端末との間の接続を確立する接続制御システムを介して受信する選択広告コンテンツ特定情報受信手段と、
上記アプリケーションサーバシステムとの間の接続が上記接続制御システムにより確立されている場合に、メインコンテンツを識別するためのメインコンテンツ識別情報を含むメインコンテンツ視聴要求と、上記受信した選択広告コンテンツ特定情報を含む広告コンテンツ視聴要求と、を当該アプリケーションサーバシステムへ送信するコンテンツ視聴要求送信手段と、
を実現させるためのプログラムである。
【発明の効果】
【００１４】
本発明は、以上のように構成されることにより、視聴希望コンテンツ及び／又はユーザに応じた広告コンテンツをユーザに視聴させることができる。
【発明を実施するための最良の形態】
【００１５】
本発明の一形態であるコンテンツ配信システムは、
アプリケーションサーバシステムと接続制御システムとを含み、
上記接続制御システムは、ユーザ端末により送信された端末特定情報を受信し当該受信した端末特定情報に基づいて上記アプリケーションサーバシステムと当該ユーザ端末との間の接続を確立するように構成され、
上記アプリケーションサーバシステムは、
広告コンテンツを表す広告コンテンツデータ、及び、メインコンテンツを表すメインコンテンツデータ、を記憶するコンテンツ記憶手段と、

上記メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つ上記ユーザ端末により送信されたコンテンツ送信要求を、上記接続制御システムを介して受信する送信要求受信手段と、
上記広告コンテンツの属性を表す広告属性情報を含む広告選択用情報に基づいて、上記記憶されている広告コンテンツデータを選択する広告コンテンツ選択手段と、
上記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ、上記接続制御システムを介して送信する選択広告コンテンツ特定情報送信手段と、
を備える。
【００１６】
これによれば、コンテンツ配信システムは、広告選択用情報に基づいて選択された広告コンテンツを特定する選択広告コンテンツ特定情報をユーザ端末へ送信する。従って、例えば、選択広告コンテンツ特定情報により特定される広告コンテンツが挿入された視聴用コンテンツを出力するようにユーザ端末を構成し、且つ、メインコンテンツ（視聴希望コンテンツ）及び／又はユーザに応じて広告コンテンツを選択するようにアプリケーションサーバシステムを構成することにより、メインコンテンツ及び／又はユーザに応じた広告コンテンツが挿入された視聴用コンテンツをユーザに視聴させることができる。
【００１７】
この場合、上記ユーザ端末は、
上記アプリケーションサーバシステムにより送信された上記選択広告コンテンツ特定情報を受信する選択広告コンテンツ特定情報受信手段と、
上記アプリケーションサーバシステムとの間の接続が上記接続制御システムにより確立されている場合に、上記メインコンテンツ識別情報を含むメインコンテンツ視聴要求と、上記受信した選択広告コンテンツ特定情報を含む広告コンテンツ視聴要求と、を当該アプリケーションサーバシステムへ送信するコンテンツ視聴要求送信手段と、
を備え、
上記アプリケーションサーバシステムは、上記ユーザ端末により送信された上記メインコンテンツ視聴要求を受信し、当該受信したメインコンテンツ視聴要求に含まれるメインコンテンツ識別情報により識別されるメインコンテンツデータを当該ユーザ端末へ送信するとともに、当該ユーザ端末により送信された上記広告コンテンツ視聴要求を受信し、当該受信した広告コンテンツ視聴要求に含まれる選択広告コンテンツ特定情報により特定される広告コンテンツデータを当該ユーザ端末へ送信するコンテンツ送信手段を備えることが好適である。
【００１８】
この場合、
上記ユーザ端末は、上記アプリケーションサーバシステムにより送信されたメインコンテンツデータ及び広告コンテンツデータを受信し、当該受信したメインコンテンツデータ及び広告コンテンツデータに基づいて、当該メインコンテンツデータが表すメインコンテンツに当該広告コンテンツデータが表す広告コンテンツを挿入した視聴用コンテンツを出力するコンテンツ出力手段を備えることが好適である。
【００１９】
これによれば、例えば、メインコンテンツ（視聴希望コンテンツ）及び／又はユーザに応じて広告コンテンツを選択するようにアプリケーションサーバシステムを構成することにより、メインコンテンツ及び／又はユーザに応じた広告コンテンツが挿入された視聴用コンテンツをユーザに視聴させることができる。
【００２０】
この場合、
上記選択広告コンテンツ特定情報送信手段は、上記コンテンツ送信要求に含まれる上記メインコンテンツ識別情報と、上記選択広告コンテンツ特定情報と、を含む情報であって、当該メインコンテンツ識別情報により識別されるメインコンテンツ及び当該選択広告コ

ンテンツ特定情報により特定される広告コンテンツが出力される順序を表す情報を含む情報であるプレイリスト情報を、上記接続制御システムを介して、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ送信するように構成され、
上記選択広告コンテンツ特定情報受信手段は、上記アプリケーションサーバシステムにより送信された上記プレイリスト情報を受信するように構成され、
上記コンテンツ視聴要求送信手段は、上記受信されたプレイリスト情報に基づいて、上記メインコンテンツ視聴要求及び上記広告コンテンツ視聴要求を上記アプリケーションサーバシステムへ送信するように構成されることが好適である。
【００２１】
これによれば、ユーザ端末によってメインコンテンツ及び広告コンテンツが出力される順序を、アプリケーションサーバシステムに決定させることができる。これにより、広告コンテンツを提供する事業者の意図をより大きく反映した態様にて広告コンテンツをユーザに視聴させることができる。
【００２２】
この場合、
上記コンテンツ記憶手段は、上記広告コンテンツデータと、当該広告コンテンツデータが表す広告コンテンツの属性を表す広告属性情報と、を対応付けて記憶するように構成され、
上記広告選択用情報は、上記広告属性情報を特定するための情報であって上記ユーザ端末のユーザを識別するためのユーザ識別情報と対応付けられた情報であるユーザ基礎情報を含み、
上記広告コンテンツ選択手段は、上記コンテンツ送信要求を送信してきたユーザ端末のユーザを識別するためのユーザ識別情報と対応付けられたユーザ基礎情報により特定される広告属性情報と対応付けて記憶されている広告コンテンツデータを選択するように構成されることが好適である。
【００２３】
これによれば、コンテンツ配信システムは、コンテンツ送信要求を送信してきたユーザ端末のユーザに応じた広告コンテンツが挿入された視聴用コンテンツをユーザに視聴させることができる。
【００２４】
この場合、
上記コンテンツ記憶手段は、上記広告コンテンツデータと、当該広告コンテンツデータが表す広告コンテンツの属性を表す広告属性情報と、を対応付けて記憶するように構成され、
上記広告選択用情報は、上記広告属性情報を特定するための情報であって上記メインコンテンツを識別するメインコンテンツ識別情報と対応付けられた情報であるコンテンツ基礎情報を含み、
上記広告コンテンツ選択手段は、上記受信されたコンテンツ送信要求に含まれるメインコンテンツ識別情報と対応付けられたコンテンツ基礎情報により特定される広告属性情報と対応付けて記憶されている広告コンテンツデータを選択するように構成されることが好適である。
【００２５】
これによれば、コンテンツ配信システムは、受信されたコンテンツ送信要求に含まれるメインコンテンツ識別情報により識別されるメインコンテンツに応じた広告コンテンツが挿入された視聴用コンテンツをユーザに視聴させることができる。
【００２６】
この場合、
上記選択広告コンテンツ特定情報送信手段は、上記接続制御システムが上記接続を確立するための処理を行う際に、上記選択広告コンテンツ特定情報を当該接続制御システムを介して上記ユーザ端末へ送信するように構成されることが好適である。

【００２７】
ところで、接続制御システムが接続を確立するための処理を行う前に、選択広告コンテンツ特定情報をユーザ端末へ送信するように、アプリケーションサーバシステムが構成されている場合であって、選択広告コンテンツ特定情報の送信後に広告選択用情報が変更された場合には、その変更後の広告選択用情報を、ユーザ端末が受信した選択広告コンテンツ特定情報に反映することができない。
【００２８】
これに対し、上記構成によれば、アプリケーションサーバシステムは、接続制御システムが接続を確立するための処理を行う時点における最新の広告選択用情報を反映した選択広告コンテンツ特定情報をユーザ端末へ送信することができる。
【００２９】
この場合、
上記接続制御システムは、上記ユーザ端末及び上記アプリケーションサーバシステムのそれぞれとの間で所定の接続確立用メッセージを授受することにより上記接続を確立するように構成され、
上記選択広告コンテンツ特定情報送信手段は、上記接続確立用メッセージに上記選択広告コンテンツ特定情報を含ませることにより、当該選択広告コンテンツ特定情報を当該接続制御システムを介して上記ユーザ端末へ送信するように構成されることが好適である。
【００３０】
これによれば、アプリケーションサーバシステムが選択広告コンテンツ特定情報をユーザ端末へ送信するために、接続確立用メッセージ以外のメッセージを別途送信する必要がない。即ち、接続制御システム、アプリケーションサーバシステム及びユーザ端末の間の通信回数を減らすことができる。換言すると、接続制御システム、アプリケーションサーバシステム及びユーザ端末がメッセージを授受するための処理負荷、及び／又は、通信負荷を軽減することができる。
【００３１】
この場合、
上記アプリケーションサーバシステムは、サービス制御サーバとメディアサーバとを含み、
上記サービス制御サーバは、上記送信要求受信手段、上記広告コンテンツ選択手段及び上記選択広告コンテンツ特定情報送信手段を備え、
上記メディアサーバは、上記コンテンツ記憶手段を備えることが好適である。
【００３２】
また、上記コンテンツ配信システムの他の態様において、
上記アプリケーションサーバシステムは、サービス制御サーバとメディアサーバとを含み、
上記サービス制御サーバは、上記送信要求受信手段を備え、
上記メディアサーバは、上記コンテンツ記憶手段、上記広告コンテンツ選択手段及び上記選択広告コンテンツ特定情報送信手段を備え、
上記サービス制御サーバは、上記広告選択用情報を、上記接続制御システムを介して上記メディアサーバへ送信する広告選択用情報送信手段を備え、
上記メディアサーバは、上記サービス制御サーバにより送信された上記広告選択用情報を受信する広告選択用情報受信手段を備え、
上記広告コンテンツ選択手段は、上記受信された広告選択用情報に基づいて、上記広告コンテンツデータを選択するように構成されることが好適である。
【００３３】
また、本発明の他の形態であるコンテンツ配信システムは、
アプリケーションサーバシステムと接続制御システムとを含み、
上記接続制御システムは、ユーザ端末（Ｕｓｅｒ　Ｅｑｕｉｐｍｅｎｔ）により送信された端末特定情報を受信し当該受信した端末特定情報に基づいて上記アプリケーションサ

ーバシステムと当該ユーザ端末との間の接続を確立するコアＩＭＳ部（Ｃｏｒｅ　ＩＭＳ（Ｉｎｔｅｒｎｅｔ　Ｐｒｏｔｏｃｏｌ　Ｍｕｌｔｉｍｅｄｉａ　Ｓｕｂｓｙｓｔｅｍ））を備え、
上記アプリケーションサーバシステムは、
上記コアＩＭＳ部により接続が確立された上記ユーザ端末へ、コンテンツを表すコンテンツデータを送信するメディア機能部（Ｍｅｄｉａ　Ｆｕｎｃｔｉｏｎｓ）と、
上記メディア機能部により提供されるサービスを制御するサービス制御機能部（Ｓｅｒｖｉｃｅ　Ｃｏｎｔｒｏｌ　Ｆｕｎｃｔｉｏｎｓ）と、
上記ユーザ端末のユーザのプロファイル情報を記憶するユーザプロファイルサーバ機能部（Ｕｓｅｒ　Ｐｒｏｆｉｌｅ　Ｓｅｒｖｅｒ　Ｆｕｎｃｔｉｏｎｓ）と、を備え、
上記メディア機能部は、
広告コンテンツを表す広告コンテンツデータ、及び、メインコンテンツを表すメインコンテンツデータ、を記憶するコンテンツ記憶手段を備え、
上記サービス制御機能部は、
上記メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つ上記ユーザ端末により送信されたコンテンツ送信要求を、上記コアＩＭＳ部を介して受信する送信要求受信手段と、
上記広告コンテンツの属性を表す広告属性情報を含み、且つ、上記ユーザプロファイルサーバ機能部、上記サービス制御機能部又は上記接続制御システムにより予め記憶された広告選択用情報に基づいて、上記記憶されている広告コンテンツデータを選択する広告コンテンツ選択手段と、
上記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ、上記コアＩＭＳ部を介して送信する選択広告コンテンツ特定情報送信手段と、
を備える。
【００３４】
この場合、上記ユーザ端末は、
上記サービス制御機能部により送信された上記選択広告コンテンツ特定情報を受信する選択広告コンテンツ特定情報受信手段と、
上記メディア機能部との間の接続が上記コアＩＭＳ部により確立されている場合に、上記メインコンテンツ識別情報を含むメインコンテンツ視聴要求と、上記受信した選択広告コンテンツ特定情報を含む広告コンテンツ視聴要求と、を当該メディア機能部へ送信するコンテンツ視聴要求送信手段と、
を備え、
上記メディア機能部は、上記ユーザ端末により送信された上記メインコンテンツ視聴要求を受信し、当該受信したメインコンテンツ視聴要求に含まれるメインコンテンツ識別情報により識別されるメインコンテンツデータを当該ユーザ端末へ送信するとともに、当該ユーザ端末により送信された上記広告コンテンツ視聴要求を受信し、当該受信した広告コンテンツ視聴要求に含まれる選択広告コンテンツ特定情報により特定される広告コンテンツデータを当該ユーザ端末へ送信するコンテンツ送信手段を備えることが好適である。
【００３５】
この場合、
上記ユーザ端末は、上記メディア機能部により送信されたメインコンテンツデータ及び広告コンテンツデータを受信し、当該受信したメインコンテンツデータ及び広告コンテンツデータに基づいて、当該メインコンテンツデータが表すメインコンテンツに当該広告コンテンツデータが表す広告コンテンツを挿入した視聴用コンテンツを出力するコンテンツ出力手段を備えることが好適である。
【００３６】
この場合、
上記選択広告コンテンツ特定情報送信手段は、上記コンテンツ送信要求に含まれる上記

メインコンテンツ識別情報と、上記選択広告コンテンツ特定情報と、を含む情報であって、当該メインコンテンツ識別情報により識別されるメインコンテンツ及び当該選択広告コンテンツ特定情報により特定される広告コンテンツが出力される順序を表す情報を含む情報であるプレイリスト情報を、上記コアＩＭＳ部を介して、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ送信するように構成され、

上記選択広告コンテンツ特定情報受信手段は、上記サービス制御機能部により送信された上記プレイリスト情報を受信するように構成され、

上記コンテンツ視聴要求送信手段は、上記受信されたプレイリスト情報に基づいて、上記メインコンテンツ視聴要求及び上記広告コンテンツ視聴要求を上記メディア機能部へ送信するように構成されることが好適である。

【００３７】

また、本発明の他の形態であるコンテンツ配信方法は、

広告コンテンツを表す広告コンテンツデータ、及び、メインコンテンツを表すメインコンテンツデータ、を記憶装置に記憶させるコンテンツ記憶処理工程と、

接続制御システムが、ユーザ端末により送信された端末特定情報を受信し当該受信した端末特定情報に基づいてアプリケーションサーバシステムと当該ユーザ端末との間の接続を確立する接続確立工程と、

上記アプリケーションサーバシステムが、上記メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つ上記ユーザ端末により送信されたコンテンツ送信要求を、上記接続制御システムを介して受信する送信要求受信工程と、

上記広告コンテンツの属性を表す広告属性情報を含む広告選択用情報に基づいて、上記記憶されている広告コンテンツデータを選択する広告コンテンツ選択工程と、

上記アプリケーションサーバシステムが、上記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ、上記接続制御システムを介して送信する選択広告コンテンツ特定情報送信工程と、

を含む。

【００３８】

この場合、上記コンテンツ配信方法は、

上記ユーザ端末が、上記アプリケーションサーバシステムにより送信された上記選択広告コンテンツ特定情報を受信する選択広告コンテンツ特定情報受信工程と、

上記ユーザ端末と上記アプリケーションサーバシステムとの間の接続が上記接続制御システムにより確立されている場合に、当該ユーザ端末が、上記メインコンテンツ識別情報を含むメインコンテンツ視聴要求と、上記受信した選択広告コンテンツ特定情報を含む広告コンテンツ視聴要求と、を当該アプリケーションサーバシステムへ送信するコンテンツ視聴要求送信工程と、

上記アプリケーションサーバシステムが、上記ユーザ端末により送信された上記メインコンテンツ視聴要求を受信し、当該受信したメインコンテンツ視聴要求に含まれるメインコンテンツ識別情報により識別されるメインコンテンツデータを当該ユーザ端末へ送信するとともに、当該ユーザ端末により送信された上記広告コンテンツ視聴要求を受信し、当該受信した広告コンテンツ視聴要求に含まれる選択広告コンテンツ特定情報により特定される広告コンテンツデータを当該ユーザ端末へ送信するコンテンツ送信工程と、

を含むことが好適である。

【００３９】

この場合、上記コンテンツ配信方法は、

上記ユーザ端末が、上記アプリケーションサーバシステムにより送信されたメインコンテンツデータ及び広告コンテンツデータを受信し、当該受信したメインコンテンツデータ及び広告コンテンツデータに基づいて、当該メインコンテンツデータが表すメインコンテンツに当該広告コンテンツデータが表す広告コンテンツを挿入した視聴用コンテンツを出力するコンテンツ出力工程を含むことが好適である。

【００４０】
この場合、
上記選択広告コンテンツ特定情報送信工程は、上記コンテンツ送信要求に含まれる上記メインコンテンツ識別情報と、上記選択広告コンテンツ特定情報と、を含む情報であって、当該メインコンテンツ識別情報により識別されるメインコンテンツ及び当該選択広告コンテンツ特定情報により特定される広告コンテンツが出力される順序を表す情報を含む情報であるプレイリスト情報を、上記接続制御システムを介して、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ送信するように構成され、
上記選択広告コンテンツ特定情報受信工程は、上記アプリケーションサーバシステムにより送信された上記プレイリスト情報を受信するように構成され、
上記コンテンツ視聴要求送信工程は、上記受信されたプレイリスト情報に基づいて、上記メインコンテンツ視聴要求及び上記広告コンテンツ視聴要求を上記アプリケーションサーバシステムへ送信するように構成されることが好適である。
【００４１】
また、本発明の他の形態であるプログラムは、
サービス制御サーバに、
メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つユーザ端末により送信されたコンテンツ送信要求を、メディアサーバと当該ユーザ端末との間の接続を確立する接続制御システムを介して受信する送信要求受信手段と、
広告コンテンツの属性を表す広告属性情報を含む広告選択用情報に基づいて、予め記憶装置に記憶されている広告コンテンツデータを選択する広告コンテンツ選択手段と、
上記選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ、上記接続制御システムを介して送信する選択広告コンテンツ特定情報送信手段と、
を実現させるためのプログラムである。
【００４２】
この場合、
上記選択広告コンテンツ特定情報送信手段は、上記コンテンツ送信要求に含まれる上記メインコンテンツ識別情報と、上記選択広告コンテンツ特定情報と、を含む情報であって、当該メインコンテンツ識別情報により識別されるメインコンテンツ及び当該選択広告コンテンツ特定情報により特定される広告コンテンツが出力される順序を表す情報を含む情報であるプレイリスト情報を、上記コンテンツ送信要求を送信してきた上記ユーザ端末へ、上記接続制御システムを介して送信するように構成されることが好適である。
【００４３】
また、本発明の他の形態であるプログラムは、
ユーザ端末に、
選択された広告コンテンツデータを特定する情報であって、アプリケーションサーバシステムにより送信された情報である選択広告コンテンツ特定情報を、当該アプリケーションサーバシステムと当該ユーザ端末との間の接続を確立する接続制御システムを介して受信する選択広告コンテンツ特定情報受信手段と、
上記アプリケーションサーバシステムとの間の接続が上記接続制御システムにより確立されている場合に、メインコンテンツを識別するためのメインコンテンツ識別情報を含むメインコンテンツ視聴要求と、上記受信した選択広告コンテンツ特定情報を含む広告コンテンツ視聴要求と、を当該アプリケーションサーバシステムへ送信するコンテンツ視聴要求送信手段と、
を実現させるためのプログラムである。
【００４４】
この場合、上記プログラムは、
上記ユーザ端末に、更に、
上記アプリケーションサーバシステムにより送信されたメインコンテンツデータ及び広

告コンテンツデータを受信し、当該受信したメインコンテンツデータ及び広告コンテンツデータに基づいて、当該メインコンテンツデータが表すメインコンテンツに当該広告コンテンツデータが表す広告コンテンツを挿入した視聴用コンテンツを出力するコンテンツ出力手段を実現させるためのプログラムであることが好適である。

【００４５】

この場合、

上記選択広告コンテンツ特定情報受信手段は、上記メインコンテンツ識別情報と、上記選択広告コンテンツ特定情報と、を含む情報であって、当該メインコンテンツ識別情報により識別されるメインコンテンツ及び当該選択広告コンテンツ特定情報により特定される広告コンテンツが出力される順序を表す情報を含む情報であって、上記アプリケーションサーバシステムにより送信された情報であるプレイリスト情報を受信するように構成され、

上記コンテンツ視聴要求送信手段は、上記受信されたプレイリスト情報に基づいて、上記メインコンテンツ視聴要求及び上記広告コンテンツ視聴要求を上記アプリケーションサーバシステムへ送信するように構成されることが好適である。

【００４６】

上述した構成を有する、コンテンツ配信方法、又は、プログラム、の発明であっても、上記コンテンツ配信システムと同様の作用を有するために、上述した本発明の目的を達成することができる。

【００４７】

以下、本発明に係る、コンテンツ配信システム、コンテンツ配信方法、及び、プログラム、の各実施形態について図１～図２０を参照しながら説明する。

【００４８】

＜第１実施形態＞

（構成）

図１に示したように、第１実施形態に係るコンテンツ配信システム１は、ビデオオンデマンド（Ｖｉｄｅｏ　ｏｎ　Ｄｅｍａｎｄ）システムである。なお、コンテンツ配信システム１は、コンテンツの放送を行うＩＰＴＶ（Ｉｎｔｅｒｎｅｔ　Ｐｒｏｔｏｃｏｌ　Ｔｅｌｅｖｉｓｉｏｎ）システムであってもよい。

【００４９】

コンテンツ配信システム１は、接続制御システム３と、アプリケーションサーバシステム４と、を含む。接続制御システム３は、接続制御サーバ３ａ及び接続制御サーバ３ｂを含む複数のサーバを含む。アプリケーションサーバシステム４は、サービス制御サーバ４ａ、メディアサーバ４ｂ及びユーザ情報管理サーバ４ｃを含む複数のサーバを含む。

【００５０】

接続制御サーバ３ａは、ＩＰ（Ｉｎｔｅｒｎｅｔ　Ｐｒｏｔｏｃｏｌ）網を構成するユーザ側通信回線ＮＷ１を介して、ユーザ端末（ＵＥ；Ｕｓｅｒ　Ｅｑｕｉｐｍｅｎｔ）２と通信可能に接続されている。接続制御サーバ３ｂ及びアプリケーションサーバシステム４は、上記ＩＰ網を構成するサービス提供者側通信回線ＮＷ２を介して、互いに通信可能に接続されている。

【００５１】

ユーザ端末２は、図示しないセットトップボックス及びリモートコントローラを備える。セットトップボックスは、図示しないテレビ受像機に接続されている。セットトップボックスは、メディアサーバ４ｂから送信されたコンテンツ（本例では、音声及び映像からなる動画）を表すコンテンツデータを受信し、受信したコンテンツデータを変換することによりテレビ受像機に当該コンテンツを出力させる。

【００５２】

リモートコントローラは、複数のボタン（ボタン式スイッチ）を備える。リモートコントローラは、ボタンがユーザにより押し込まれた場合に、そのボタンに応じた赤外線信号をセットトップボックスへ送信する。セットトップボックスは、リモートコントローラか

ら赤外線信号を受信することにより、ユーザにより入力された情報を受け付ける。
【００５３】
また、ユーザ端末２は、端末（自端末）を特定するための情報である端末特定情報を記憶装置としてのメモリに記憶させている。
【００５４】
接続制御サーバ３ａ、接続制御サーバ３ｂ、サービス制御サーバ４ａ、メディアサーバ４ｂ及びユーザ情報管理サーバ４ｃ（サーバ３ａ～４ｃ）のそれぞれは、図示しない中央処理装置（ＣＰＵ；Ｃｅｎｔｒａｌ　Ｐｒｏｃｅｓｓｉｎｇ　Ｕｎｉｔ）及び記憶装置（メモリ及びハードディスク駆動装置（ＨＤＤ））を備える。各サーバ３ａ～４ｃは、記憶装置に記憶されているプログラムをＣＰＵが実行することにより、後述する機能を実現するように構成されている。
【００５５】
接続制御サーバ３ａ及び接続制御サーバ３ｂのそれぞれは、ＳＩＰメッセージ（ＳＩＰ（Ｓｅｓｓｉｏｎ　Ｉｎｉｔｉａｔｉｏｎ　Ｐｒｏｔｏｃｏｌ）に従ったメッセージ）を授受（受信及び送信）することにより、複数の装置間の接続を制御するように構成されている。即ち、接続制御サーバ３ａ及び接続制御サーバ３ｂのそれぞれは、ＳＩＰサーバである。
【００５６】
接続制御システム３は、ユーザ端末２により送信された端末特定情報を含むＳＩＰメッセージを受信すると、当該受信したＳＩＰメッセージに含まれる端末特定情報に基づいてアプリケーションサーバシステム４とユーザ端末２との間の接続（セッション）を確立するように構成されている。
【００５７】
サービス制御サーバ４ａは、メディアサーバ４ｂにより提供されるサービス（コンテンツデータを送信するサービス）を制御する。メディアサーバ４ｂは、接続制御システム３により接続が確立されたユーザ端末２へ、コンテンツを表すコンテンツデータを送信する。ユーザ情報管理サーバ４ｃは、ユーザ端末２のユーザのプロファイル情報を予め記憶するとともに、記憶しているプロファイル情報をサービス制御サーバ４ａへ送信する。
【００５８】
（機能）
図２は、上記のように構成されたコンテンツ配信システム１の機能を表すブロック図である。
【００５９】
（機能：ユーザ端末）
ユーザ端末２の機能は、要求送信部１１と、プレイリスト受信部（選択広告コンテンツ特定情報受信手段）１２と、視聴要求送信部（コンテンツ視聴要求送信手段）１３と、コンテンツ出力部（コンテンツ出力手段）１４と、を含む。
【００６０】
要求送信部１１は、ユーザ端末２の電源スイッチの状態がオン状態に設定される（電力が供給される）と、記憶している端末特定情報を含む端末認証処理要求としてのＳＩＰメッセージを接続制御サーバ３ａへ送信する。
【００６１】
また、要求送信部１１は、接続制御システム３から端末認証成功情報を含むＳＩＰメッセージを受信する。端末認証成功情報は、ＩＰ網上の位置を表す端末アドレス情報を含み、その端末アドレス情報が表す位置のユーザ端末２が正当な端末であることが認証された旨を表す情報である。
【００６２】
更に、要求送信部１１は、ユーザ端末２のユーザによりリモートコントローラを介して入力されたユーザ認証用情報を含むＳＩＰメッセージをユーザ認証処理要求として接続制御システム３へ送信する。本例では、ユーザ認証用情報は、ユーザ端末２のユーザを識別

するための文字列を表すユーザ識別情報と、パスワードとしての文字列を表すパスワード情報と、からなる。

【００６３】

また、要求送信部１１は、接続制御システム３からユーザ認証成功情報を含むＳＩＰメッセージを受信する。ユーザ認証成功情報は、ユーザ識別情報を含み、そのユーザ識別情報により識別されるユーザ（即ち、ユーザ認証用情報を入力したユーザ）が正当なユーザであることが認証された旨を表す情報である。

【００６４】

要求送信部１１は、接続制御システム３からユーザ認証成功情報を受信した場合、ユーザ端末２のユーザにより入力された要求送信指示に応じて、アプリケーションサーバシステムに対して処理の実行を要求する処理要求を含むＳＩＰメッセージを接続制御システム３へ送信する。処理要求は、ユーザ認証成功情報（即ち、ユーザ識別情報）を含む。

【００６５】

プレイリスト受信部１２は、接続制御システム３（後述するコアＩＭＳ部３０）を介してアプリケーションサーバシステム４（後述するサービス制御機能部４０）により送信されたプレイリスト情報を受信する。

【００６６】

本例では、プレイリスト情報は、コンテンツを識別するためのコンテンツ識別情報と、そのコンテンツ識別情報により識別されるコンテンツの再生開始位置及び再生終了位置と、の組からなるコンテンツ要素情報を複数含む。ここで、コンテンツ識別情報は、メインコンテンツを識別するためのメインコンテンツ識別情報、又は、広告コンテンツを識別するための広告コンテンツ識別情報（選択広告コンテンツ特定情報）である。

【００６７】

更に、プレイリスト情報は、コンテンツ（メインコンテンツ識別情報により識別されるメインコンテンツ及び選択広告コンテンツ特定情報により特定される広告コンテンツ）が出力される順序（コンテンツの出力順序）を表す情報を含む情報である。

【００６８】

視聴要求送信部１３は、ユーザ端末２とアプリケーションサーバシステム４との間の接続が接続制御システム３（後述するコアＩＭＳ部３０）により確立されている場合に、プレイリスト受信部１２により受信されたプレイリスト情報に基づいて、メインコンテンツ視聴要求及び広告コンテンツ視聴要求をアプリケーションサーバシステム４へ送信する。

【００６９】

メインコンテンツ視聴要求は、メインコンテンツ識別情報と再生開始位置とを含む。広告コンテンツ視聴要求は、広告コンテンツ識別情報（選択広告コンテンツ特定情報）と再生開始位置とを含む。

【００７０】

具体的には、視聴要求送信部１３は、プレイリスト受信部１２により受信されたプレイリスト情報が表すコンテンツの出力順序に従って、コンテンツ視聴要求（メインコンテンツ視聴要求又は広告コンテンツ視聴要求）を１つずつ所定のタイミングにて送信する。

【００７１】

本例では、視聴要求送信部１３は、後述するコンテンツ出力部１４により出力中のコンテンツの再生位置が、プレイリスト情報にて当該コンテンツと対応付けられた再生終了位置よりも所定の時間だけ前の位置に到達したとき、当該コンテンツの次に出力されるようにプレイリスト情報において定められたコンテンツに係るコンテンツ視聴要求をアプリケーションサーバシステム４へ送信する。

【００７２】

更に、視聴要求送信部１３は、後述するコンテンツ出力部１４により出力中のコンテンツの再生位置が、プレイリスト情報にて当該コンテンツと対応付けられた再生終了位置に到達したとき、当該コンテンツを表すコンテンツデータの送信の停止を要求する再生停止要求をアプリケーションサーバシステム４へ送信するとともに、当該コンテンツの次に出

力されるようにプレイリスト情報において定められたコンテンツを表すコンテンツデータの送信の開始を要求する再生開始要求をアプリケーションサーバシステム４へ送信する。
【００７３】
コンテンツ出力部１４は、アプリケーションサーバシステム４により送信されたコンテンツデータを受信し、受信したコンテンツデータが表すコンテンツを出力する（本例では、テレビ受像機に出力させる）。即ち、コンテンツ出力部１４は、メインコンテンツデータ及び広告コンテンツデータを受信し、当該受信したメインコンテンツデータ及び広告コンテンツデータに基づいて、当該メインコンテンツデータが表すメインコンテンツに当該広告コンテンツデータが表す広告コンテンツを挿入した視聴用コンテンツを出力する、と言うことができる。
【００７４】
（機能：接続制御システム）
接続制御システム３の機能は、コアＩＭＳ部（Ｃｏｒｅ　ＩＭＳ（Ｉｎｔｅｒｎｅｔ　Ｐｒｏｔｏｃｏｌ　Ｍｕｌｔｉｍｅｄｉａ　Ｓｕｂｓｙｓｔｅｍ））３０及びトランスポート機能部（ＴＦ（Ｔｒａｎｓｐｏｒｔ　Ｆｕｎｃｔｉｏｎ））８０を含む。
【００７５】
コアＩＭＳ部３０は、呼接続制御部３１と、ＩＭＳ認証部（ユーザ認証手段）３２と、を含む。また、トランスポート機能部８０は、帯域確保部８１と、端末認証部８２と、を含む。
【００７６】
呼接続制御部３１は、ＳＩＰメッセージを授受（受信及び送信）することにより、複数の装置間の接続を制御する。
【００７７】
また、端末認証部８２は、接続制御サーバ３ａがユーザ端末２から端末認証処理要求を受信した場合、受信した端末認証処理要求に含まれる端末特定情報と、端末認証用基準情報と、が対応（本例では、一致）しているか否かを判定することにより、ユーザ端末２が正当な端末であるか否かを認証する（端末認証処理を行う）。ここで、端末認証用基準情報は、接続制御サーバ３ａが備える記憶装置に予め記憶された情報である。なお、端末認証用基準情報は、ユーザ情報管理サーバ４ｃが備える記憶装置（後述するユーザプロファイルサーバ機能部５０）に記憶されていてもよい。
【００７８】
端末認証部８２は、ユーザ端末２が正当な端末であると認証された場合、端末認証成功情報を含むＳＩＰメッセージをユーザ端末２へ送信する。
また、呼接続制御部３１は、端末認証部８２により、ユーザ端末２が正当な端末であると認証された場合、以降において、ユーザ端末２から送信されたメッセージ（処理要求等）に基づく処理（例えば、アプリケーションサーバシステム４へメッセージを転送する処理）を行う。
【００７９】
一方、呼接続制御部３１は、端末認証部８２により、ユーザ端末２が正当な端末であると認証されなかった場合、以降において、ユーザ端末２から送信されたメッセージ（処理要求等）に基づく処理を行わない。
【００８０】
更に、ＩＭＳ認証部３２は、接続制御サーバ３ａがユーザ端末２からユーザ認証処理要求を受信した場合、受信したユーザ認証処理要求に含まれるユーザ認証用情報と、ユーザ認証用基準情報と、が対応しているか否かを判定することにより、そのユーザ認証用情報を入力したユーザ（ユーザ認証用情報に含まれるユーザ識別情報により識別されるユーザ）が正当なユーザである（ユーザ識別情報により識別されるユーザがユーザ端末２のユーザと一致する）か否かを認証する（ユーザ認証処理を行う）。ここで、ユーザ認証用基準情報は、ユーザ情報管理サーバ４ｃが備える記憶装置（後述するユーザプロファイルサーバ機能部５０）に予め記憶された情報である。即ち、ユーザプロファイルサーバ機能部５

０は、ユーザ認証用基準情報記憶手段を構成している。
【００８１】
そして、呼接続制御部３１は、ＩＭＳ認証部３２により、ユーザ認証用情報を入力したユーザが正当なユーザであると認証された場合、ユーザ端末２へユーザ認証成功情報を含むＳＩＰメッセージを送信する。一方、呼接続制御部３１は、ＩＭＳ認証部３２により、ユーザ認証用情報を入力したユーザが正当なユーザであると認証されなかった場合、ユーザ端末２へユーザ認証成功情報を含むＳＩＰメッセージを送信しない。
【００８２】
更に、呼接続制御部３１は、サービス制御サーバ４ａから帯域確保指示を受信した場合、メディアサーバ４ｂとユーザ端末２との間の接続を確立する。帯域確保指示は、メディアサーバ４ｂを特定するためのメディア配信特定情報と、通信帯域を表す通信帯域情報と、を含む。呼接続制御部３１は、受信した通信帯域情報と、受信したメディア配信特定情報により特定されるメディアサーバ４ｂとユーザ端末２との間の通信経路を特定する通信経路特定情報と、をトランスポート機能部８０へ送信する。
【００８３】
帯域確保部８１は、呼接続制御部３１から通信帯域情報及び通信経路特定情報を受信し、受信した通信経路特定情報により特定される通信経路にて、受信した通信帯域情報が表す通信帯域を確保するための処理（帯域確保処理）を行う。
【００８４】
（機能：ユーザ情報管理サーバ）
一方、ユーザ情報管理サーバ４ｃの機能は、ユーザプロファイルサーバ機能部（ＵＰＳＦ；Ｕｓｅｒ　Ｐｒｏｆｉｌｅ　Ｓｅｒｖｅｒ　Ｆｕｎｃｔｉｏｎｓ）５０を含む。
ユーザプロファイルサーバ機能部５０は、ユーザ端末２のユーザのプロファイル情報を記憶している。ユーザプロファイルサーバ機能部５０は、ユーザ基礎情報記憶部５１を含む。
【００８５】
ユーザ基礎情報記憶部５１は、ユーザ端末２のユーザを識別するためのユーザ識別情報と対応付けて、ユーザ基礎情報を記憶している。ユーザ基礎情報は、広告コンテンツの属性（本例では、広告コンテンツのカテゴリー（例えば、自動車、不動産、旅行、保険、携帯電話、コーヒー、小道具等））を表す広告属性情報を特定するための情報である。本例では、ユーザ基礎情報は、図３に示したように、広告属性情報と、優先度（本例では、優先度が高くなるほど大きくなる整数）を表す優先度情報と、の組を複数含む。ユーザ基礎情報は、広告選択用情報の一部を構成している。
【００８６】
（機能：サービス制御サーバ）
一方、サービス制御サーバ４ａの機能は、サービス制御機能部（ＳＣＦ；Ｓｅｒｖｉｃｅ　Ｃｏｎｔｒｏｌ　Ｆｕｎｃｔｉｏｎｓ）４０を含む。
【００８７】
サービス制御機能部４０は、情報送受信部（送信要求受信手段及び選択広告コンテンツ特定情報送信手段）４１と、コンテンツ基礎情報記憶部４２と、広告属性情報記憶部（コンテンツ記憶手段の一部、コンテンツ記憶処理工程の一部）４３と、広告挿入情報記憶部４４と、プレイリスト生成部（広告コンテンツ選択手段）４５と、配信要求部４６と、を含む。
【００８８】
情報送受信部４１は、コアＩＭＳ部３０を介して（コアＩＭＳ部３０を経由させて）、ユーザ端末２又はメディアサーバ４ｂから送信された種々の情報（要求、指示及び通知等）を受信する。また、情報送受信部４１は、コアＩＭＳ部３０を介して、種々の情報をユーザ端末２又はメディアサーバ４ｂへ送信する。なお、本例では、種々の情報は、ＳＩＰメッセージに含まれる。
【００８９】

なお、サービス制御サーバ４ａは、ユーザ端末２から、ユーザ認証成功情報を含む処理要求を受信した場合に限って、その処理要求に基づく処理を行う。即ち、アプリケーションサーバシステム４は、ＩＭＳ認証部３２により、ユーザ認証用情報を入力したユーザが正当なユーザであると認証された場合に、処理要求に基づく処理を行う、と言うことができる。

【００９０】

コンテンツ基礎情報記憶部４２は、メインコンテンツを識別するためのメインコンテンツ識別情報と対応付けて、コンテンツ基礎情報を記憶している。コンテンツ基礎情報は、広告属性情報を特定するための情報である。本例では、コンテンツ基礎情報は、ユーザ基礎情報と同様に、広告属性情報と優先度情報との組を複数含む。コンテンツ基礎情報は、広告選択用情報の一部を構成している。

【００９１】

広告属性情報記憶部４３は、広告コンテンツを識別するための広告コンテンツ識別情報と、広告属性情報と、を対応付けて記憶している。

【００９２】

広告挿入情報記憶部４４は、メインコンテンツ識別情報と、挿入数情報と、挿入位置情報と、を対応付けて記憶している。挿入数情報は、メインコンテンツ内に挿入される広告コンテンツの数である挿入数を表す情報である。挿入位置情報は、メインコンテンツ内の位置であって広告コンテンツを挿入するための位置（本例では、メインコンテンツの先頭からの再生時間）である挿入位置を表す情報である。

【００９３】

プレイリスト生成部４５は、情報送受信部４１により受信された処理要求としてのコンテンツ送信要求を受け付ける。コンテンツ送信要求は、ユーザ端末２により送信され、且つ、ユーザ認証成功情報（即ち、ユーザ識別情報）、端末アドレス情報及びメインコンテンツ識別情報を含む情報である。

【００９４】

プレイリスト生成部４５は、ユーザ基礎情報記憶部５１に記憶されているユーザ基礎情報のうちの、情報送受信部４１により受信されたコンテンツ送信要求に含まれるユーザ識別情報と対応付けて記憶されているユーザ基礎情報を取得する。

【００９５】

更に、プレイリスト生成部４５は、コンテンツ基礎情報記憶部４２に記憶されているコンテンツ基礎情報のうちの、コンテンツ送信要求に含まれるメインコンテンツ識別情報と対応付けて記憶されているコンテンツ基礎情報を取得する。

【００９６】

そして、プレイリスト生成部４５は、上記取得したユーザ基礎情報に含まれる優先度情報が表す優先度と、上記取得したコンテンツ基礎情報に含まれる優先度情報が表す優先度と、を、広告属性情報毎に合算することにより、広告属性情報毎の最終優先度を算出する。

【００９７】

次いで、プレイリスト生成部４５は、広告属性情報記憶部４３により記憶されている広告コンテンツ識別情報のうちの、上記算出した最終優先度が最大である広告属性情報と対応付けられた広告コンテンツ識別情報を抽出する。

【００９８】

一方、プレイリスト生成部４５は、広告挿入情報記憶部４４に記憶されている挿入数情報及び挿入位置情報のうちの、コンテンツ送信要求に含まれるメインコンテンツ識別情報と対応付けて記憶されている挿入数情報及び挿入位置情報を取得する。

【００９９】

そして、プレイリスト生成部４５は、上記抽出した広告コンテンツ識別情報の中から、上記取得した挿入数情報が表す数だけ、広告コンテンツ識別情報を選択する。

このように、プレイリスト生成部４５は、コンテンツ送信要求を送信してきたユーザ端

末２のユーザを識別するためのユーザ識別情報と対応付けられたユーザ基礎情報と、コンテンツ送信要求に含まれるメインコンテンツ識別情報と対応付けられたコンテンツ基礎情報と、に基づいて特定される広告属性情報と対応付けて記憶されている広告コンテンツデータを選択している、と言うことができる。

【０１００】

次いで、プレイリスト生成部４５は、選択した広告コンテンツ識別情報（即ち、選択した広告コンテンツデータを特定するための選択広告コンテンツ特定情報）と、コンテンツ送信要求に含まれるメインコンテンツ識別情報と、上記取得した挿入位置情報と、に基づいてプレイリスト情報を生成する。

【０１０１】

即ち、プレイリスト情報は、コンテンツ送信要求に含まれるメインコンテンツ識別情報と、プレイリスト生成部４５により選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報と、を含む情報である、と言うことができる。

【０１０２】

配信要求部４６は、コンテンツ送信指示を出力する。コンテンツ送信指示は、プレイリスト生成部４５により生成されたプレイリスト情報と、コンテンツ送信要求に含まれるユーザ認証成功情報（即ち、ユーザ識別情報）、端末アドレス情報及びメインコンテンツ識別情報と、を含む。

【０１０３】

情報送受信部４１は、配信要求部４６により出力されたコンテンツ送信指示をコアＩＭＳ部３０を介してメディアサーバ４ｂへ送信する。

更に、情報送受信部４１は、メディアサーバ４ｂにより送信された送信許可通知を受信すると、プレイリスト生成部４５により生成されたプレイリスト情報をコアＩＭＳ部３０を介してユーザ端末２へ送信する。送信許可通知は、メディアサーバ（本例では、メディアサーバ４ｂ）を特定するためのメディア配信特定情報と、プレイリスト情報と、を含む。

【０１０４】

（機能：メディアサーバ）

メディアサーバ４ｂの機能は、メディア機能部（ＭＦ；Ｍｅｄｉａ　Ｆｕｎｃｔｉｏｎｓ）６０を含む。メディア機能部６０は、メディア制御機能部（ＭＣＦ；Ｍｅｄｉａ　Ｃｏｎｔｒｏｌ　Ｆｕｎｃｔｉｏｎｓ）、及び、メディア配信機能部（ＭＤＦ；Ｍｅｄｉａ　Ｄｅｌｉｖｅｒｙ　Ｆｕｎｃｔｉｏｎｓ）を含む。

【０１０５】

メディア機能部６０は、情報送受信部６１と、コンテンツデータ記憶部（コンテンツ記憶手段の一部、コンテンツ記憶処理工程の一部）６２と、コンテンツ配信制御部６３と、コンテンツ配信部（コンテンツ送信手段）６５と、を含む。

【０１０６】

情報送受信部６１は、サービス制御サーバ４ａから送信された種々の情報をコアＩＭＳ部３０を介して受信する。具体的には、情報送受信部６１は、サービス制御サーバ４ａから送信されたコンテンツ送信指示等をコアＩＭＳ部３０を介して受信する。また、情報送受信部６１は、種々の情報をサービス制御サーバ４ａへコアＩＭＳ部３０を介して送信する。具体的には、情報送受信部６１は、送信許可通知等をサービス制御サーバ４ａへコアＩＭＳ部３０を介して送信する。

【０１０７】

コンテンツデータ記憶部６２は、メインコンテンツを表すメインコンテンツデータと、当該メインコンテンツを識別するためのメインコンテンツ識別情報と、を対応付けて記憶する。更に、コンテンツデータ記憶部６２は、広告コンテンツを表す広告コンテンツデータと、当該広告コンテンツを識別するための広告コンテンツ識別情報と、を対応付けて記憶する。

【０１０８】

コンテンツ配信制御部６３は、ユーザ端末２からメインコンテンツ視聴要求を受信する。メインコンテンツ視聴要求は、メインコンテンツ識別情報と再生開始位置とユーザ識別情報とを含む。更に、コンテンツ配信制御部６３は、ユーザ端末２から広告コンテンツ視聴要求を受信する。広告コンテンツ視聴要求は、広告コンテンツ識別情報と再生開始位置とユーザ識別情報とを含む。

【０１０９】

また、コンテンツ配信制御部６３は、ユーザ端末２から再生開始要求を受信する。加えて、コンテンツ配信制御部６３は、ユーザ端末２から再生停止要求を受信する。

【０１１０】

コンテンツ配信部６５は、コンテンツ配信制御部６３により再生開始要求が受信されると、コンテンツ視聴要求により識別されるコンテンツデータを、コンテンツ視聴要求に含まれる再生開始位置から、ユーザ端末２へ送信する。

【０１１１】

このとき、コンテンツ配信部６５は、コアＩＭＳ部３０により確立されたセッションを用いて、所定の通信プロトコル（本例では、ＲＴＰ（Ｒｅａｌ－ｔｉｍｅ　Ｔｒａｎｓｐｏｒｔ　Ｐｒｏｔｏｃｏｌ））に従ってデータを送信する。

【０１１２】

即ち、コンテンツ配信部６５は、コンテンツ送信要求を送信してきたユーザ端末２とメディアサーバ４ｂとの間の接続が接続制御システム３により確立されている場合に、コンテンツデータ記憶部６２により記憶させられているコンテンツデータ（メインコンテンツデータ及び広告コンテンツデータ）を当該ユーザ端末２へ送信する、と言うことができる。

【０１１３】

また、コンテンツ配信部６５は、コンテンツ配信制御部６３により再生停止要求が受信されると、送信中のコンテンツデータの送信を停止する。

【０１１４】

（作動）

次に、上述したコンテンツ配信システム１の作動について具体的に述べる。

【０１１５】

（作動：認証処理）

コンテンツ配信システム１がユーザ端末２のユーザを認証する際のコンテンツ配信システム１の作動について、図４のシーケンス図を参照しながら説明する。

【０１１６】

先ず、ユーザがユーザ端末２の電源スイッチの状態をオン状態に設定することにより、ユーザ端末２に電力が供給される。これにより、ユーザ端末２は、記憶している端末特定情報を含む端末認証処理要求を接続制御サーバ３ａ（トランスポート機能部８０）へ送信する（ステップＡ４０１）。

【０１１７】

トランスポート機能部８０は、受信した端末認証処理要求に含まれる端末特定情報と、予め記憶された端末認証用基準情報と、が対応（本例では、一致）しているか否かを判定することにより、ユーザ端末２が正当な端末であるか否かを認証（端末認証処理を実行）する（ステップＢ４０１）。そして、トランスポート機能部８０は、ユーザ端末２が正当な端末であると認証された場合、端末認証成功情報をユーザ端末２へ送信する（ステップＢ４０２）。端末認証成功情報は、端末アドレス情報を含み、且つ、ユーザ端末２が正当な端末であると認証された旨を表す情報である。

【０１１８】

ユーザ端末２は、端末認証成功情報を受信すると、ユーザ認証用情報の入力をユーザＵＡに促す画像を、図示しないテレビ受像機に表示させる。これにより、ユーザＵＡは、リモートコントローラを操作することにより、ユーザ認証用情報を入力する。

【０１１９】

そして、ユーザ端末２は、ユーザ認証用情報の入力を受け付けると、受け付けたユーザ認証用情報を含むユーザ認証処理要求をコアＩＭＳ部３０へ送信する（ステップＡ４０２）。

【０１２０】

これにより、コアＩＭＳ部３０は、ユーザ認証処理要求を受信する。コアＩＭＳ部３０は、受信したユーザ認証処理要求に含まれるユーザ認証用情報と、予め記憶されたユーザ認証用基準情報と、が対応（本例では、一致）しているか否かを判定することにより、ユーザ認証用基準情報に含まれるユーザ識別情報により識別されるユーザ（ユーザ認証用情報を入力したユーザ）が正当なユーザであるか否かを認証（ユーザ認証処理を実行）する（ステップＢ４０３、ユーザ認証工程）。そして、コアＩＭＳ部３０は、ユーザ認証用情報を入力したユーザが正当なユーザであると認証された場合、ユーザ認証成功情報をユーザ端末２へ送信する（ステップＢ４０４）。

【０１２１】

これにより、ユーザ端末２は、ユーザ認証成功情報を受信する。そして、以降において、ユーザ端末２は、ユーザ認証成功情報を含む処理要求（を含むＳＩＰメッセージ）をコアＩＭＳ部３０へ送信する。

【０１２２】

（作動：コンテンツ視聴処理）

次に、コンテンツ配信システム１がユーザ端末２のユーザの入力に応じて、コンテンツデータをユーザ端末２へ送信する際のコンテンツ配信システム１の作動について、図５及び図６のシーケンス図を参照しながら説明する。

【０１２３】

先ず、ユーザ端末２のユーザは、視聴可能なコンテンツの一覧を表すコンテンツ一覧情報の送信を要求する処理要求を送信する旨を指示する情報をユーザ端末２に入力する。これにより、ユーザ端末２は、その処理要求をコアＩＭＳ部３０を介してサービス制御サーバ４ａ（サービス制御機能部４０）へ送信する。

【０１２４】

そして、サービス制御機能部４０は、コンテンツデータ記憶部６２に記憶されているメインコンテンツデータが表すメインコンテンツの一覧を表すコンテンツ一覧情報をコアＩＭＳ部３０を介してユーザ端末２へ送信する。ユーザ端末２は、コンテンツ一覧情報を受信すると、受信したコンテンツ一覧情報が表すメインコンテンツの一覧を図示しないテレビ受像機に表示させる。

【０１２５】

なお、コンテンツ配信システム１は、ユーザ端末２とＨＴＴＰ（Ｈｙｐｅｒｔｅｘｔ Ｔｒａｎｓｆｅｒ Ｐｒｏｔｏｃｏｌ）に従って通信可能に構成された図示しないポータルサーバからユーザ端末２へコンテンツ一覧情報が送信されるように構成されていてもよい。

【０１２６】

テレビ受像機にメインコンテンツの一覧が表示されている状態において、ユーザ端末２のユーザは、視聴を希望するメインコンテンツを選択し、選択したメインコンテンツを識別するためのメインコンテンツ識別情報を入力する。

【０１２７】

これにより、図５に示したように、ユーザ端末２は、入力されたメインコンテンツ識別情報と、ユーザを識別するためのユーザ識別情報としてのユーザ認証成功情報と、端末アドレス情報と、を含む処理要求としてのコンテンツ送信要求をコアＩＭＳ部３０へ送信する（ステップＡ５０１）。コンテンツ送信要求は、ＳＩＰメッセージのうちのＩＮＶＩＴＥメッセージ（メソッドとして「ＩＮＶＩＴＥ」が設定されたメッセージ）として送信される。

【０１２８】

そして、コアＩＭＳ部３０は、コンテンツ送信要求を受信する。次いで、コアＩＭＳ部

３０は、通信帯域を確保するための準備としての帯域予約処理を行う。そして、コアＩＭＳ部３０は、受信したコンテンツ送信要求をサービス制御機能部４０へ送信する（ステップＢ５０１）。

【０１２９】

次いで、サービス制御機能部４０は、コンテンツ送信要求を受信する（送信要求受信工程）。そして、サービス制御機能部４０は、受信したコンテンツ送信要求に含まれるユーザ識別情報及びメインコンテンツ識別情報に基づいて、ユーザ基礎情報及びコンテンツ基礎情報を取得する。

【０１３０】

そして、サービス制御機能部４０は、上記取得したユーザ基礎情報と、上記取得したコンテンツ基礎情報と、に基づいて、広告属性情報毎の最終優先度を算出する。更に、サービス制御機能部４０は、広告属性情報記憶部４３に記憶されている広告コンテンツ識別情報の中から、算出した最終優先度が最大である広告属性情報と対応付けられた広告コンテンツ識別情報を抽出する。

【０１３１】

一方、サービス制御機能部４０は、広告挿入情報記憶部４４に記憶されている挿入数情報及び挿入位置情報のうちの、コンテンツ送信要求に含まれるメインコンテンツ識別情報と対応付けて記憶されている挿入数情報及び挿入位置情報を取得する。

【０１３２】

そして、サービス制御機能部４０は、上記抽出した広告コンテンツ識別情報の中から、上記取得した挿入数情報が表す数だけ、広告コンテンツ識別情報を選択する（広告コンテンツ選択工程）。次いで、サービス制御機能部４０は、選択した広告コンテンツ識別情報と、コンテンツ送信要求に含まれるメインコンテンツ識別情報と、上記取得した挿入位置情報と、に基づいてプレイリスト情報を生成する（ステップＣ５０１）。プレイリスト情報は、メインコンテンツ識別情報と選択広告コンテンツ特定情報とを含む情報である。

【０１３３】

そして、サービス制御機能部４０は、メディアサーバ４ｂ（メディア機能部６０）を選択し、コンテンツ送信指示をコアＩＭＳ部３０を介して、選択したメディア機能部６０へ送信する（ステップＣ５０２）。コンテンツ送信指示は、生成されたプレイリスト情報と、ユーザ識別情報と、端末アドレス情報と、を含む。

【０１３４】

コンテンツ送信指示は、ＳＩＰメッセージのうちのＩＮＶＩＴＥメッセージとして送信される。図７に示したように、ＩＮＶＩＴＥメッセージは、ヘッダ部ＨＤとボディ部ＢＤとを含む。本例では、プレイリスト情報ＰＬは、ＩＮＶＩＴＥメッセージのうちのヘッダ部ＨＤにてフィールド「Ｘ－ｖｉｄｅｏ－ｓｅｑｕｅｎｃｅ」の値として含まれている。

【０１３５】

本例では、プレイリスト情報ＰＬは、「，」により区切られた５つのコンテンツ要素情報を含む。第１のコンテンツ要素情報は、「；」により区切られた、メインコンテンツ識別情報としての「ｃｏｎｔｅｎｔ１」と、そのメインコンテンツの再生開始位置としての「０」と、そのメインコンテンツの再生終了位置としての「３００」と、の組からなる。第２のコンテンツ要素情報は、「；」により区切られた、広告コンテンツ識別情報としての「ａｄｖ１」と、その広告コンテンツの再生開始位置としての「０」と、その広告コンテンツの再生終了位置としての「３０」と、の組からなる。第３のコンテンツ要素情報～第５のコンテンツ要素情報も、第１のコンテンツ要素情報及び第２のコンテンツ要素情報と同様である。

【０１３６】

そして、メディア機能部６０は、コンテンツ送信指示を受信する。次いで、メディア機能部６０は、コンテンツ送信指示に含まれるプレイリスト情報及び端末アドレス情報に基づいて、コンテンツデータを送信するメディアサーバを決定する。更に、メディア機能部６０は、送信許可通知をコアＩＭＳ部３０を介してサービス制御機能部４０へ送信する（

ステップＤ５０１）。
【０１３７】
送信許可通知は、決定されたメディアサーバ（本例では、メディアサーバ４ｂ）を特定するためのメディア配信特定情報と、プレイリスト情報と、を含む。送信許可通知は、ＳＩＰメッセージのうちのＯＫメッセージ（ステータスコードとしての「２００」と、「ＯＫ」と、を開始行に含むレスポンス）として送信される。
【０１３８】
これにより、サービス制御機能部４０は、メディア配信特定情報及びプレイリスト情報を受信する。そして、サービス制御機能部４０は、受信したメディア配信特定情報及びプレイリスト情報に基づいて、プレイリスト情報により識別されるコンテンツデータを送信するために必要とされる通信帯域を決定する。
【０１３９】
更に、サービス制御機能部４０は、決定した通信帯域を表す通信帯域情報と、受信したメディア配信特定情報及びプレイリスト情報と、を含む帯域確保指示をコアＩＭＳ部３０へ送信する（ステップＣ５０３）。帯域確保指示は、ＳＩＰメッセージのうちのＯＫメッセージとして送信される。
【０１４０】
コアＩＭＳ部３０は、帯域確保指示を受信すると、受信した通信帯域情報と、受信したメディア配信特定情報により特定されるメディアサーバ４ｂとユーザ端末２との間の通信経路を特定する通信経路特定情報と、をトランスポート機能部８０へ送信する。これにより、トランスポート機能部８０は、受信した通信経路特定情報により特定される通信経路にて、受信した通信帯域情報が表す通信帯域を確保するための処理（帯域確保処理）を行う。
【０１４１】
そして、コアＩＭＳ部３０は、帯域確保処理が完了すると、送信準備完了通知をユーザ端末２へ送信する（ステップＢ５０２）。送信準備完了通知は、受信されたメディア配信特定情報及びプレイリスト情報を含む。送信準備完了通知は、ＳＩＰメッセージのうちのＯＫメッセージとして送信される。
【０１４２】
このように、帯域確保指示又は送信準備完了通知として送信されるＯＫメッセージは、コアＩＭＳ部３０がユーザ端末２とメディア機能部６０との間の接続を確立するために、コアＩＭＳ部３０がユーザ端末２、サービス制御機能部４０及びメディア機能部６０のそれぞれとの間で授受する接続確立用メッセージの１つである。
【０１４３】
即ち、サービス制御機能部４０は、接続確立用メッセージに選択広告コンテンツ特定情報を含ませることにより、選択広告コンテンツ特定情報をコアＩＭＳ部３０を介してユーザ端末２へ送信する（選択広告コンテンツ特定情報送信工程）、と言うことができる。
【０１４４】
換言すると、サービス制御機能部４０は、コアＩＭＳ部３０がユーザ端末２とメディア機能部６０との間の接続を確立するための処理を行う際に、選択広告コンテンツ特定情報を含むプレイリスト情報をコアＩＭＳ部３０を介してユーザ端末２へ送信する、と言うことができる。
【０１４５】
そして、ユーザ端末２は、送信準備完了通知を受信する（選択広告コンテンツ特定情報受信工程）と、接続準備完了通知をコアＩＭＳ部３０を介してサービス制御機能部４０へ送信する（ステップＡ５０２）。接続準備完了通知は、ＳＩＰメッセージのうちのＡＣＫメッセージ（メソッドとして「ＡＣＫ」が設定されたメッセージ）として送信される。
【０１４６】
サービス制御機能部４０は、接続準備完了通知を受信すると、受信した接続準備完了通知と同様の接続準備完了通知をコアＩＭＳ部３０を介してメディア機能部６０へ送信する

（ステップＣ５０４）。この接続準備完了通知も、ＳＩＰメッセージのうちのＡＣＫメッセージとして送信される。

【０１４７】

そして、メディア機能部６０が接続準備完了通知を受信することにより、メディアサーバ４ｂとユーザ端末２との間の接続（セッション）が確立される（ステップＥ５０１）。なお、ステップＡ５０１～ステップＥ５０１の処理は、接続確立工程を構成している。また、コアＩＭＳ部３０は、ＳＩＰメッセージを中継することにより、メディアサーバ４ｂ（メディア機能部６０）とユーザ端末２との間の接続を確立する、と言うことができる。

【０１４８】

なお、ステップＡ５０１～ステップＥ５０１にて、接続制御システム３（コアＩＭＳ部３０）がユーザ端末２、サービス制御サーバ４ａ及びメディアサーバ４ｂのそれぞれとの間で授受するＳＩＰメッセージは、接続制御システム３がユーザ端末２とメディアサーバ４ｂとの間の接続を確立するための接続確立用メッセージである、と言うことができる。

【０１４９】

なお、本例では、ＲＴＳＰ（Ｒｅａｌ　Ｔｉｍｅ　Ｓｔｒｅａｍｉｎｇ　Ｐｒｏｔｏｃｏｌ）に従った通信を行うための接続と、ＲＴＰに従った通信を行うための接続と、の両方が同時に確立される。

【０１５０】

その後、図６に示したように、ユーザ端末２は、受信した送信準備完了通知に含まれるメディア配信特定情報により特定されるメディアサーバ４ｂ（メディア機能部６０）へ、受信した送信準備完了通知に含まれるプレイリスト情報ＰＬに基づいてコンテンツ視聴要求を送信する（コンテンツ視聴要求送信工程）。

【０１５１】

具体的に述べると、ユーザ端末２は、先ず、プレイリスト情報ＰＬにおける先頭のコンテンツ要素情報（即ち、第１のコンテンツ要素情報）に含まれるコンテンツ識別情報（本例では、「ｃｏｎｔｅｎｔ１」）と、そのコンテンツ要素情報に含まれる再生開始位置（本例では、「０」）と、を含むコンテンツ視聴要求（本例では、メインコンテンツ視聴要求）をメディア機能部６０へ送信する（ステップＡ５０３）。

【０１５２】

コンテンツ視聴要求は、更に、ユーザ端末２のユーザを識別するためのユーザ識別情報を含む。コンテンツ視聴要求は、ＲＴＳＰメッセージ（ＲＴＳＰに従ったメッセージ）のうちのＳＥＴＵＰメッセージ（メソッドとして「ＳＥＴＵＰ」が設定されたメッセージ）として送信される。

【０１５３】

そして、メディア機能部６０は、コンテンツ視聴要求を受信する。次いで、メディア機能部６０は、コンテンツデータ記憶部６２に記憶されている広告コンテンツデータ及びメインコンテンツデータのうちの、上記受信したコンテンツ視聴要求に含まれるコンテンツ識別情報により識別されるコンテンツデータを取得する。

【０１５４】

そして、メディア機能部６０は、コンテンツ送信準備完了通知を、コンテンツ視聴要求を送信してきたユーザ端末２へ送信する（ステップＤ５０２）。コンテンツ送信準備完了通知は、ＲＴＳＰメッセージのうちのＯＫメッセージ（ステータスコードとしての「２００」と、「ＯＫ」と、を開始行に含むレスポンス）として送信される。

【０１５５】

そして、ユーザ端末２は、コンテンツ送信準備完了通知を受信すると、上記ステップＡ５０３にて送信したコンテンツ視聴要求に係るコンテンツ（ここでは、メインコンテンツ識別情報「ｃｏｎｔｅｎｔ１」により識別されるメインコンテンツ）の再生開始要求をメディア機能部６０へ送信する（ステップＡ５０４）。再生開始要求は、ＲＴＳＰメッセージのうちのＰＬＡＹメッセージ（メソッドとして「ＰＬＡＹ」が設定されたメッセージ）として送信される。

【０１５６】
次いで、メディア機能部６０は、再生開始要求を受信すると、再生開始通知をユーザ端末２へ送信する（ステップＤ５０３）。再生開始通知は、コンテンツデータの送信を開始する旨を表す情報である。再生開始通知は、ＲＴＳＰメッセージのうちのＯＫメッセージとして送信される。
【０１５７】
そして、メディア機能部６０は、上記受信したコンテンツ視聴要求により識別されるコンテンツデータ（ここでは、メインコンテンツデータ）を、当該コンテンツ視聴要求に含まれる再生開始位置（本例では、「０」）から、ユーザ端末２へ送信する（ステップＤ５０４、コンテンツ送信工程）。このとき、メディア機能部６０は、コアＩＭＳ部３０により確立されたセッションを用いて、ＲＴＰに従ってデータを送信する。
【０１５８】
これにより、ユーザ端末２は、コンテンツデータを受信し、受信したコンテンツデータが表すコンテンツ（ここでは、メインコンテンツ識別情報「ｃｏｎｔｅｎｔ１」により識別されるメインコンテンツ）を図示しないテレビ受像機に出力させる（コンテンツ出力工程）。
【０１５９】
その後、ユーザ端末２は、出力中のコンテンツの再生位置が、プレイリスト情報ＰＬにて当該コンテンツと対応付けられた再生終了位置（本例では、「３００」）よりも所定の時間だけ前の位置に到達したとき、プレイリスト情報ＰＬにおいて当該コンテンツに係るコンテンツ要素情報の次に位置するコンテンツ要素情報（即ち、第２のコンテンツ要素情報）に含まれるコンテンツ識別情報（本例では、「ａｄｖ１」）と、そのコンテンツ要素情報に含まれる再生開始位置（本例では、「０」）と、を含むコンテンツ視聴要求（本例では、広告コンテンツ視聴要求）をメディア機能部６０へ送信する（ステップＡ５０５）。
【０１６０】
そして、メディア機能部６０は、コンテンツ視聴要求を受信する。次いで、メディア機能部６０は、上記ステップＤ５０２と同様に、コンテンツ送信準備完了通知を、コンテンツ視聴要求を送信してきたユーザ端末２へ送信する（ステップＤ５０５）。
【０１６１】
そして、ユーザ端末２は、出力中のコンテンツの再生位置が、プレイリスト情報ＰＬにて当該コンテンツと対応付けられた再生終了位置（本例では、「３００」）に到達したとき、当該コンテンツ（即ち、メインコンテンツ）を表すコンテンツデータの送信の停止を要求する再生停止要求をメディア機能部６０へ送信する（ステップＡ５０６）。再生停止要求は、ＲＴＳＰメッセージのうちのＰＡＵＳＥメッセージ（メソッドとして「ＰＡＵＳＥ」が設定されたメッセージ）として送信される。
【０１６２】
次いで、メディア機能部６０は、再生停止要求を受信すると、コンテンツデータの送信を停止する。
【０１６３】
更に、ユーザ端末２は、上記ステップＡ５０５にて送信したコンテンツ視聴要求に係るコンテンツ（ここでは、広告コンテンツ識別情報「ａｄｖ１」により識別される広告コンテンツ）の再生開始要求をメディア機能部６０へ送信する（ステップＡ５０７）。
【０１６４】
次いで、メディア機能部６０は、再生開始要求を受信すると、再生開始通知をユーザ端末２へ送信する（ステップＤ５０６）。そして、メディア機能部６０は、上記受信したコンテンツ視聴要求により識別されるコンテンツデータ（ここでは、広告コンテンツデータ）を、当該コンテンツ視聴要求に含まれる再生開始位置（本例では、「０」）から、ユーザ端末２へ送信する（ステップＤ５０７、コンテンツ送信工程）。
【０１６５】

これにより、ユーザ端末２は、コンテンツデータを受信し、受信したコンテンツデータが表すコンテンツ（ここでは、広告コンテンツ識別情報「ａｄｖ１」により識別される広告コンテンツ）を図示しないテレビ受像機に出力させる。

【０１６６】

ユーザ端末２は、このような処理を繰り返し行うことにより、プレイリスト情報ＰＬに基づいて、メインコンテンツデータが表すメインコンテンツに当該広告コンテンツデータが表す広告コンテンツを挿入した視聴用コンテンツを出力する。

【０１６７】

以上、説明したように、本発明によるコンテンツ配信システムの第１実施形態によれば、コンテンツ配信システム１は、広告選択用情報に基づいて選択された広告コンテンツを特定する選択広告コンテンツ特定情報をユーザ端末２へ送信する。従って、広告選択用情報に応じた広告コンテンツが挿入された視聴用コンテンツをユーザに視聴させることができる。

【０１６８】

更に、上記第１実施形態によれば、ユーザ端末２によってメインコンテンツ及び広告コンテンツが出力される順序を、アプリケーションサーバシステム４に決定させることができる。これにより、広告コンテンツを提供する事業者の意図をより大きく反映した態様にて広告コンテンツをユーザに視聴させることができる。

【０１６９】

更に、上記第１実施形態において、広告選択用情報は、ユーザ識別情報と対応付けられたユーザ基礎情報を含む。これによれば、コンテンツ配信システム１は、コンテンツ送信要求を送信してきたユーザ端末２のユーザに応じた広告コンテンツが挿入された視聴用コンテンツをユーザに視聴させることができる。

【０１７０】

加えて、上記第１実施形態において、広告選択用情報は、メインコンテンツ識別情報と対応付けられたコンテンツ基礎情報を含む。これによれば、コンテンツ配信システム１は、受信されたコンテンツ送信要求に含まれるメインコンテンツ識別情報により識別されるメインコンテンツに応じた広告コンテンツが挿入された視聴用コンテンツをユーザに視聴させることができる。

【０１７１】

更に、上記第１実施形態において、サービス制御機能部４０は、接続制御システム３が接続を確立するための処理を行う際に、選択広告コンテンツ特定情報を含むプレイリスト情報を接続制御システム３を介してユーザ端末２へ送信するように構成されている。これによれば、サービス制御サーバ４ａは、接続制御システム３が接続を確立するための処理を行う時点における最新の広告選択用情報を反映したプレイリスト情報をユーザ端末２へ送信することができる。

【０１７２】

加えて、上記第１実施形態において、サービス制御機能部４０は、選択広告コンテンツ特定情報を含むプレイリスト情報を接続確立用メッセージに含ませることにより、プレイリスト情報を接続制御システム３を介してユーザ端末２へ送信するように構成されている。

【０１７３】

これによれば、サービス制御サーバ４ａがプレイリスト情報をユーザ端末２へ送信するために、接続確立用メッセージ以外のメッセージを別途送信する必要がない。即ち、接続制御システム３、サービス制御サーバ４ａ及びユーザ端末２の間の通信回数を減らすことができる。換言すると、接続制御システム３、サービス制御サーバ４ａ及びユーザ端末２がメッセージを授受するための処理負荷、及び／又は、通信負荷を軽減することができる。

【０１７４】

なお、上記第１実施形態は、プレイリスト情報をＩＮＶＩＴＥメッセージのヘッダ部H

Ｄに含ませるように構成されていたが、ＩＮＶＩＴＥメッセージの開始行（Ｒｅｑｕｅｓｔ－Ｌｉｎｅ）にプレイリスト情報を含ませるように構成されていてもよい。例えば、図８に示したように、開始行のＲｅｑｕｅｓｔ－ＵＲＩ（要求ＵＲＩ（Ｕｎｉｆｏｒｍ　Ｒｅｓｏｕｒｃｅ　Ｉｄｅｎｔｉｆｉｅｒ））にプレイリスト情報ＰＬを含ませるように構成されていてもよい。

【０１７５】

また、上記第１実施形態は、プレイリスト情報をＩＮＶＩＴＥメッセージのヘッダ部ＨＤに含ませるように構成されていたが、ＩＮＶＩＴＥメッセージのボディ部ＢＤにプレイリスト情報を含ませるように構成されていてもよい。例えば、図９に示したように、ボディ部ＢＤのＳＤＰ（Ｓｅｓｓｉｏｎ　Ｄｅｓｃｒｉｐｔｉｏｎ　Ｐｒｏｔｏｃｏｌ）におけるタイプ「ａ」の値のうちの属性「ｖｉｄｅｏｓｅｑｕｅｎｃｅ」の値としてプレイリスト情報ＰＬを含ませるように構成されていてもよい。

【０１７６】

また、上記第１実施形態は、プレイリスト情報をＩＮＶＩＴＥメッセージのヘッダ部ＨＤに含ませるように構成されていたが、ＩＮＶＩＴＥメッセージのボディ部ＢＤが、第１の形式に従った第１の部分と、第２の形式に従った第２の部分と、を含む（即ち、ボディ部ＢＤをマルチパート化する）とともに、第１の部分及び第２の部分の一方にプレイリスト情報を含ませるように構成されていてもよい。

【０１７７】

例えば、図１０に示したように、ボディ部が、ＳＤＰに従った第１の部分ＢＤ１と、テキスト形式に従った第２の部分ＢＤ２と、を含むとともに、第２の部分ＢＤ２にプレイリスト情報を含ませるように構成されていてもよい。

【０１７８】

また、上記第１実施形態は、プレイリスト情報をＩＮＶＩＴＥメッセージに直接含ませるように構成されていたが、プレイリスト情報を参照するための参照情報をＩＮＶＩＴＥメッセージに含ませるように構成されていてもよい。例えば、図１１に示したように、ボディ部ＢＤのＳＤＰにおけるタイプ「ｕ」の値としてプレイリスト情報を参照（取得）するためのＵＲＩを表す参照情報（実質的にはプレイリスト情報）ＰＬをＩＮＶＩＴＥメッセージに含ませるように構成されていてもよい。

【０１７９】

なお、上記第１実施形態は、ステップＡ５０１～ステップＥ５０１の処理が行われることにより、ＲＴＳＰに従った通信を行うための接続（ＲＴＳＰ用接続）と、ＲＴＰに従った通信を行うための接続（ＲＴＰ用接続）と、の両方が同時に確立されるように構成されていた。ところで、上記第１実施形態の他の変形例において、ステップＡ５０１～ステップＥ５０１の処理が行われることにより、先ず、ＲＴＳＰ用接続が確立され、続いて、ステップＡ５０１～ステップＥ５０１の処理と同様の処理が再び行われることにより、ＲＴＰ用接続が確立されるように構成されていてもよい。

【０１８０】

また、上記第１実施形態において、コンテンツ配信システム１は、メインコンテンツデータ及び広告コンテンツデータを送信するために、ＲＴＰに従った通信を行うための接続（ＲＴＰ用接続）を１つだけ確立するように構成されていたが、メインコンテンツデータを送信するためのＲＴＰ用接続と、広告コンテンツデータを送信するためのＲＴＰ用接続と、からなる２つのＲＴＰ用接続を確立するように構成されていてもよい。

【０１８１】

また、上記第１実施形態においては、サービス制御機能部４０は、メディア機能部６０へプレイリスト情報を送信するように構成されていたが、メディア機能部６０へプレイリスト情報を送信することなく（即ち、コンテンツ送信指示にプレイリスト情報を含ませることなく）ユーザ端末２のみにプレイリスト情報を送信するように構成されていてもよい。

【０１８２】

＜第１実施形態の第１変形例＞
　次に、本発明の第１実施形態の第１変形例に係るコンテンツ配信システムについて説明する。この第１変形例に係るコンテンツ配信システムは、上記第１実施形態に係るコンテンツ配信システムに対して、プレイリスト情報を接続確立用メッセージ以外のメッセージに含ませるように構成されている点において相違している。従って、以下、かかる相違点を中心として説明する。
　【０１８３】
　この第１変形例に係るサービス制御機能部４０は、ユーザ端末２により送信されたコンテンツ送信要求を受信すると、第１実施形態と相違して、プレイリスト情報を生成しない。そして、サービス制御機能部４０は、図１２に示したように、プレイリスト情報を含まないコンテンツ送信指示をコアＩＭＳ部３０を介してメディア機能部６０へ送信する（ステップＣ１１０１）。
　【０１８４】
　そして、メディア機能部６０は、コンテンツ送信指示を受信すると、第１実施形態に係るステップＤ５０１と同様に、送信許可通知をコアＩＭＳ部３０を介してサービス制御機能部４０へ送信する（ステップＤ１１０１）。送信許可通知は、ＳＩＰメッセージのうちのＯＫメッセージとして送信される。
　【０１８５】
　そして、サービス制御機能部４０は、送信許可通知を受信すると、第１実施形態に係るステップＣ５０１と同様に、プレイリスト情報を生成する（ステップＣ１１０２）。次いで、サービス制御機能部４０は、生成したプレイリスト情報を含むプレイリスト通知を、コアＩＭＳ部３０を介してメディア機能部６０へ送信する（ステップＣ１１０３）。プレイリスト通知は、ＳＩＰメッセージのうちのＩＮＦＯメッセージ（メソッドとして「ＩＮＦＯ」が設定されたメッセージ）として送信される。なお、プレイリスト通知は、ＳＩＰメッセージのうちのＭＥＳＳＡＧＥメッセージ（メソッドとして「ＭＥＳＳＡＧＥ」が設定されたメッセージ）として送信されてもよい。
　【０１８６】
　これにより、メディア機能部６０は、プレイリスト通知を受信する。そして、メディア機能部６０は、プレイリスト受信完了通知をコアＩＭＳ部３０を介してサービス制御機能部４０へ送信する（ステップＤ１１０２）。プレイリスト受信完了通知は、プレイリスト情報を含み、プレイリスト通知を受信した旨を表す情報である。プレイリスト受信完了通知は、ＳＩＰメッセージのうちのＯＫメッセージとして送信される。
　【０１８７】
　そして、サービス制御機能部４０は、プレイリスト受信完了通知を受信すると、第１実施形態に係るステップＣ５０３と同様に、プレイリスト情報をコアＩＭＳ部３０を介してユーザ端末２へ送信する。更に、コンテンツ配信システム１は、第１実施形態に係るステップＣ５０３以降の処理と同様の処理を実行することにより、ユーザ端末２とメディアサーバ４ｂとの間の接続を確立するとともに、メディアサーバ４ｂからユーザ端末２へコンテンツデータを送信する。
　この第１変形例によっても、上記第１実施形態と同様の作用及び効果を奏することができる。
　【０１８８】
＜第１実施形態の第２変形例＞
　次に、本発明の第１実施形態の第２変形例に係るコンテンツ配信システムについて説明する。この第２変形例に係るコンテンツ配信システムは、上記第１実施形態に係るコンテンツ配信システムに対して、プレイリスト情報を接続確立用メッセージ以外のメッセージに含ませるように構成されている点において相違している。従って、以下、かかる相違点を中心として説明する。
　【０１８９】
　この第２変形例に係るサービス制御機能部４０は、ユーザ端末２により送信されたコン

テンツ送信要求を受信すると、第１実施形態と相違して、プレイリスト情報を生成しない。そして、サービス制御機能部４０は、図１３に示したように、プレイリスト情報を含まないコンテンツ送信指示をコアＩＭＳ部３０を介してメディア機能部６０へ送信する（ステップＣ１２０１）。

【０１９０】

そして、メディア機能部６０は、コンテンツ送信指示を受信すると、第１実施形態に係るステップＤ５０１と同様に、送信許可通知をコアＩＭＳ部３０を介してサービス制御機能部４０へ送信する（ステップＤ１２０１）。送信許可通知は、ＳＩＰメッセージのうちのＯＫメッセージとして送信される。

【０１９１】

更に、メディア機能部６０は、プレイリスト送信要求をコアＩＭＳ部３０を介してサービス制御機能部４０へ送信する（ステップＤ１２０２）。プレイリスト送信要求は、受信したコンテンツ送信指示に含まれるユーザ識別情報、端末アドレス情報及びメインコンテンツ識別情報を含み、且つ、プレイリスト情報の送信を要求する旨を表す情報である。プレイリスト送信要求は、ＳＩＰメッセージのうちのＩＮＦＯメッセージとして送信される。なお、プレイリスト送信要求は、ＳＩＰメッセージのうちのＭＥＳＳＡＧＥメッセージとして送信されてもよい。

【０１９２】

そして、サービス制御機能部４０は、プレイリスト送信要求を受信すると、第１実施形態に係るステップＣ５０１と同様に、プレイリスト情報を生成する（ステップＣ１２０２）。次いで、サービス制御機能部４０は、生成したプレイリスト情報を含むプレイリスト通知を、コアＩＭＳ部３０を介してメディア機能部６０へ送信する（ステップＣ１２０３）。プレイリスト通知は、ＳＩＰメッセージのうちのＯＫメッセージとして送信される。

【０１９３】

これにより、メディア機能部６０は、プレイリスト通知を受信する。そして、メディア機能部６０は、プレイリスト受信完了通知をコアＩＭＳ部３０を介してサービス制御機能部４０へ送信する（ステップＤ１２０３）。プレイリスト受信完了通知は、プレイリスト情報を含み、プレイリスト通知を受信した旨を表す情報である。プレイリスト受信完了通知は、ＳＩＰメッセージのうちのＯＫメッセージとして送信される。

【０１９４】

そして、サービス制御機能部４０は、プレイリスト受信完了通知を受信すると、第１実施形態に係るステップＣ５０３と同様に、プレイリスト情報をコアＩＭＳ部３０を介してユーザ端末２へ送信する。更に、コンテンツ配信システム１は、第１実施形態に係るステップＣ５０３以降の処理と同様の処理を実行することにより、ユーザ端末２とメディアサーバ４ｂとの間の接続を確立するとともに、メディアサーバ４ｂからユーザ端末２へコンテンツデータを送信する。

この第２変形例によっても、上記第１実施形態と同様の作用及び効果を奏することができる。

【０１９５】

＜第２実施形態＞

次に、本発明の第２実施形態に係るコンテンツ配信システムについて説明する。第２実施形態に係るコンテンツ配信システムは、上記第１実施形態に係るコンテンツ配信システムに対して、サービス制御機能部４０からメディア機能部６０へ広告属性情報が送信されるとともに、メディア機能部６０がその広告属性情報に基づいてプレイリスト情報を生成する点において相違している。従って、以下、かかる相違点を中心として説明する。

【０１９６】

この第２実施形態に係るサービス制御機能部４０は、図１４に示したように、広告属性情報記憶部４３、広告挿入情報記憶部４４及びプレイリスト生成部４５を含まない。サービス制御機能部４０は、広告選択用情報取得部４７を含む。

【０１９７】

広告選択用情報取得部４７は、情報送受信部４１により受信された処理要求としてのコンテンツ送信要求を受け付ける。広告選択用情報取得部４７は、ユーザ基礎情報記憶部５１に記憶されているユーザ基礎情報のうちの、情報送受信部４１により受信されたコンテンツ送信要求に含まれるユーザ識別情報と対応付けて記憶されているユーザ基礎情報を取得する。

【０１９８】

更に、広告選択用情報取得部４７は、コンテンツ基礎情報記憶部４２に記憶されているコンテンツ基礎情報のうちの、コンテンツ送信要求に含まれるメインコンテンツ識別情報と対応付けて記憶されているコンテンツ基礎情報を取得する。

【０１９９】

配信要求部４６は、コンテンツ送信指示を出力する。コンテンツ送信指示は、広告選択用情報取得部４７により取得されたユーザ基礎情報及びコンテンツ基礎情報を含む広告選択用情報と、コンテンツ送信要求に含まれるユーザ認証成功情報（即ち、ユーザ識別情報）、端末アドレス情報及びメインコンテンツ識別情報と、を含む。

情報送受信部（送信要求受信手段及び広告選択用情報送信手段）４１は、配信要求部４６により出力されたコンテンツ送信指示をコアＩＭＳ部３０を介してメディアサーバ４ｂへ送信する。

【０２００】

一方、メディア機能部６０は、広告属性情報記憶部４３と同様の広告属性情報記憶部６６と、広告挿入情報記憶部４４と同様の広告挿入情報記憶部６７と、プレイリスト生成部４５と同様のプレイリスト生成部（広告コンテンツ選択手段）６８と、を含む。

【０２０１】

プレイリスト生成部６８は、情報送受信部（広告選択用情報受信手段）６１により受信されたコンテンツ送信指示に含まれる広告選択用情報を取得する。そして、プレイリスト生成部６８は、取得した広告選択用情報に基づいて広告属性情報毎の最終優先度を算出する。次いで、プレイリスト生成部６８は、広告属性情報記憶部６６により記憶されている広告コンテンツ識別情報のうちの、上記算出した最終優先度が最大である広告属性情報と対応付けられた広告コンテンツ識別情報を抽出する。

【０２０２】

一方、プレイリスト生成部６８は、広告挿入情報記憶部６７に記憶されている挿入数情報及び挿入位置情報のうちの、コンテンツ送信指示に含まれるメインコンテンツ識別情報と対応付けて記憶されている挿入数情報及び挿入位置情報を取得する。

【０２０３】

そして、プレイリスト生成部６８は、上記抽出した広告コンテンツ識別情報の中から、上記取得した挿入数情報が表す数だけ、広告コンテンツ識別情報を選択する。次いで、プレイリスト生成部６８は、選択した広告コンテンツ識別情報と、コンテンツ送信指示に含まれるメインコンテンツ識別情報と、上記取得した挿入位置情報と、に基づいてプレイリスト情報を生成する。

【０２０４】

そして、情報送受信部６１は、プレイリスト生成部６８により生成されたプレイリスト情報を、サービス制御機能部４０及びコアＩＭＳ部３０を介してユーザ端末２へ送信する。

【０２０５】

この第２実施形態に係るサービス制御機能部４０は、ユーザ端末２により送信されたコンテンツ送信要求を受信する（送信要求受信工程）と、第１実施形態と相違して、プレイリスト情報を生成しない。そして、サービス制御機能部４０は、図１５に示したように、プレイリスト情報に代えて広告選択用情報を含むコンテンツ送信指示をコアＩＭＳ部３０を介してメディア機能部６０へ送信する（ステップＣ１４０１、広告選択用情報送信工程）。

【０２０６】

コンテンツ送信指示は、ＳＩＰメッセージのうちのＩＮＶＩＴＥメッセージとして送信される。図１５に示したように、ＩＮＶＩＴＥメッセージは、ヘッダ部ＨＤとボディ部ＢＤとを含む。本例では、広告選択用情報のうちのユーザ基礎情報ＵＩは、ＩＮＶＩＴＥメッセージのうちのヘッダ部ＨＤにてフィールド「Ｘ－ｕｓｅｒ－ｆａｖｏｒｉｔｅ」の値として含まれている。また、広告選択用情報のうちのコンテンツ基礎情報ＣＩは、ＩＮＶＩＴＥメッセージのうちのヘッダ部ＨＤにてフィールド「Ｘ－ｃｏｎｔｅｎｔ－ｆａｖｏｒｉｔｅ」の値として含まれている。

【０２０７】

本例では、ユーザ基礎情報ＵＩ及びコンテンツ基礎情報ＣＩのそれぞれは、「，」により区切られた要素情報を含む。各要素情報のうちの「；」により区切られた先頭側の部分は、広告属性情報を表す（例えば、「ｃａｒ」は「自動車」、「ｒｅａｌ　ｅｓｔａｔｅ」は「不動産」等）。また、各要素情報のうちの「；」により区切られた末尾側の部分は、優先度情報を表す。

【０２０８】

このＩＮＶＩＴＥメッセージは、コアＩＭＳ部３０がユーザ端末２とメディア機能部６０との間の接続を確立するために、コアＩＭＳ部３０がユーザ端末２、サービス制御機能部４０及びメディア機能部６０のそれぞれとの間で授受する接続確立用メッセージの１つである。

【０２０９】

即ち、サービス制御機能部４０は、接続確立用メッセージに広告選択用情報を含ませることにより、広告選択用情報をコアＩＭＳ部３０を介してメディア機能部６０（メディアサーバ４ｂ）へ送信する、と言うことができる。

【０２１０】

換言すると、サービス制御機能部４０は、コアＩＭＳ部３０がユーザ端末２とメディア機能部６０との間の接続を確立するための処理を行う際に、広告選択用情報をコアＩＭＳ部３０を介してメディアサーバ４ｂへ送信する、と言うことができる。

【０２１１】

そして、メディア機能部６０は、サービス制御機能部４０により送信されたコンテンツ送信指示を受信する。次いで、メディア機能部６０は、受信したコンテンツ送信指示に含まれる広告選択用情報を取得する。

【０２１２】

次いで、メディア機能部６０は、取得した広告選択用情報と、広告属性情報記憶部６６により記憶されている広告コンテンツ識別情報と、広告挿入情報記憶部６７に記憶されている挿入数情報及び挿入位置情報と、に基づいて広告コンテンツ識別情報を選択する（広告コンテンツ選択工程）。更に、メディア機能部６０は、選択した広告コンテンツ識別情報と、コンテンツ送信指示に含まれるメインコンテンツ識別情報と、広告挿入情報記憶部６７に記憶されている挿入位置情報と、に基づいてプレイリスト情報を生成する（ステップＤ１４０１）。

【０２１３】

次いで、メディア機能部６０は、生成したプレイリスト情報を含む送信許可通知を、第１実施形態に係るステップＤ５０１と同様に、コアＩＭＳ部３０を介してサービス制御機能部４０へ送信する（ステップＤ５０１）。

【０２１４】

そして、サービス制御機能部４０は、送信許可通知を受信すると、第１実施形態に係るステップＣ５０３と同様に、プレイリスト情報をコアＩＭＳ部３０を介してユーザ端末２へ送信する。更に、コンテンツ配信システム１は、第１実施形態に係るステップＣ５０３以降の処理と同様の処理を実行することにより、ユーザ端末２とメディアサーバ４ｂとの間の接続を確立するとともに、メディアサーバ４ｂからユーザ端末２へコンテンツデータを送信する。

【０２１５】

以上、説明したように、本発明によるコンテンツ配信システムの第２実施形態によれば、第１実施形態と同様に、コンテンツ配信システム１は、広告選択用情報に基づいて選択された広告コンテンツを特定する選択広告コンテンツ特定情報をユーザ端末２へ送信する。従って、広告選択用情報に応じた広告コンテンツが挿入された視聴用コンテンツをユーザに視聴させることができる。

【０２１６】

更に、上記第２実施形態によれば、ユーザ端末２によってメインコンテンツ及び広告コンテンツが出力される順序を、アプリケーションサーバシステム４に決定させることができる。これにより、広告コンテンツを提供する事業者の意図をより大きく反映した態様にて広告コンテンツをユーザに視聴させることができる。

【０２１７】

更に、上記第２実施形態において、広告選択用情報は、ユーザ識別情報と対応付けられたユーザ基礎情報を含む。これによれば、コンテンツ配信システム１は、コンテンツ送信要求を送信してきたユーザ端末２のユーザに応じた広告コンテンツが挿入された視聴用コンテンツをユーザに視聴させることができる。

【０２１８】

加えて、上記第２実施形態において、広告選択用情報は、メインコンテンツ識別情報と対応付けられたコンテンツ基礎情報を含む。これによれば、コンテンツ配信システム１は、受信されたコンテンツ送信要求に含まれるメインコンテンツ識別情報により識別されるメインコンテンツに応じた広告コンテンツが挿入された視聴用コンテンツをユーザに視聴させることができる。

【０２１９】

更に、上記第２実施形態において、サービス制御機能部４０は、接続制御システム３が接続を確立するための処理を行う際に、広告選択用情報を接続制御システム３を介してメディアサーバ４ｂへ送信するように構成されている。これによれば、サービス制御サーバ４ａは、接続制御システム３が接続を確立するための処理を行う時点における最新の広告選択用情報をメディアサーバ４ｂへ送信することができる。この結果、メディアサーバ４ｂが、その変更後の広告選択用情報に基づいて広告コンテンツデータを選択することができる。

【０２２０】

加えて、上記第２実施形態において、サービス制御機能部４０は、広告選択用情報を接続確立用メッセージに含ませることにより、広告選択用情報を接続制御システム３を介してメディアサーバ４ｂへ送信するように構成されている。

【０２２１】

これによれば、サービス制御サーバ４ａが広告選択用情報をメディアサーバ４ｂへ送信するために、接続確立用メッセージ以外のメッセージを別途送信する必要がない。即ち、接続制御システム３、サービス制御サーバ４ａ及びメディアサーバ４ｂの間の通信回数を減らすことができる。換言すると、接続制御システム３、サービス制御サーバ４ａ及びメディアサーバ４ｂがメッセージを授受するための処理負荷、及び／又は、通信負荷を軽減することができる。

【０２２２】

＜第３実施形態＞

次に、本発明の第３実施形態に係るコンテンツ配信システムについて説明する。第３実施形態に係るコンテンツ配信システムは、上記第１実施形態に係るコンテンツ配信システムに対して、サービス制御機能部４０からメディア機能部６０へ選択広告コンテンツ特定情報が送信されるとともに、メディア機能部６０がその選択広告コンテンツ特定情報に基づいてプレイリスト情報を生成する点において相違している。従って、以下、かかる相違点を中心として説明する。

【０２２３】

この第３実施形態に係るサービス制御機能部４０は、図１６に示したように、広告挿入

情報記憶部４４及びプレイリスト生成部４５を含まない。サービス制御機能部４０は、広告コンテンツ選択部（広告コンテンツ選択手段）４８を含む。

【０２２４】

第３実施形態に係るコンテンツ基礎情報記憶部４２は、メインコンテンツを識別するためのメインコンテンツ識別情報と対応付けて、コンテンツ基礎情報及び挿入数情報を記憶している。

【０２２５】

広告コンテンツ選択部４８は、情報送受信部４１により受信された処理要求としてのコンテンツ送信要求を受け付ける。広告コンテンツ選択部４８は、ユーザ基礎情報記憶部５１に記憶されているユーザ基礎情報のうちの、情報送受信部４１により受信されたコンテンツ送信要求に含まれるユーザ識別情報と対応付けて記憶されているユーザ基礎情報を取得する。

【０２２６】

更に、広告コンテンツ選択部４８は、コンテンツ基礎情報記憶部４２に記憶されているコンテンツ基礎情報のうちの、コンテンツ送信要求に含まれるメインコンテンツ識別情報と対応付けて記憶されているコンテンツ基礎情報を取得する。

【０２２７】

そして、広告コンテンツ選択部４８は、上記取得したユーザ基礎情報と、上記取得したコンテンツ基礎情報と、に基づいて広告属性情報毎の最終優先度を算出する。次いで、広告コンテンツ選択部４８は、広告属性情報記憶部４３により記憶されている広告コンテンツ識別情報のうちの、上記算出した最終優先度が最大である広告属性情報と対応付けられた広告コンテンツ識別情報を抽出する。

【０２２８】

一方、広告コンテンツ選択部４８は、コンテンツ基礎情報記憶部４２に記憶されている挿入数情報のうちの、コンテンツ送信要求に含まれるメインコンテンツ識別情報と対応付けて記憶されている挿入数情報を取得する。そして、広告コンテンツ選択部４８は、上記抽出した広告コンテンツ識別情報の中から、上記取得した挿入数情報が表す数だけ、広告コンテンツ識別情報を選択する。

【０２２９】

配信要求部４６は、コンテンツ送信指示を出力する。コンテンツ送信指示は、広告コンテンツ選択部４８により選択された広告コンテンツ識別情報を含む選択広告コンテンツ特定情報と、コンテンツ送信要求に含まれるユーザ認証成功情報（即ち、ユーザ識別情報）、端末アドレス情報及びメインコンテンツ識別情報と、を含む。

情報送受信部（送信要求受信手段及び選択広告コンテンツ特定情報送信手段）４１は、配信要求部４６により出力されたコンテンツ送信指示をコアＩＭＳ部３０を介してメディアサーバ４ｂへ送信する。

【０２３０】

一方、メディア機能部６０は、広告挿入情報記憶部４４と同様の広告挿入情報記憶部６７と、プレイリスト生成部４５と同様のプレイリスト生成部６８と、を含む。

【０２３１】

プレイリスト生成部６８は、情報送受信部６１により受信されたコンテンツ送信指示に含まれる選択広告コンテンツ特定情報を取得する。

一方、プレイリスト生成部６８は、広告挿入情報記憶部６７に記憶されている挿入位置情報のうちの、コンテンツ送信指示に含まれるメインコンテンツ識別情報と対応付けて記憶されている挿入位置情報を取得する。

【０２３２】

そして、プレイリスト生成部６８は、上記取得した選択広告コンテンツ特定情報に含まれる広告コンテンツ識別情報と、コンテンツ送信指示に含まれるメインコンテンツ識別情報と、上記取得した挿入位置情報と、に基づいてプレイリスト情報を生成する。

【０２３３】

そして、情報送受信部６１は、プレイリスト生成部６８により生成されたプレイリスト情報を、サービス制御機能部４０及びコアＩＭＳ部３０を介してユーザ端末２へ送信する。

【０２３４】

この第３実施形態に係るサービス制御機能部４０は、ユーザ端末２により送信されたコンテンツ送信要求を受信する（送信要求受信工程）と、第１実施形態と相違して、プレイリスト情報を生成しない。そして、サービス制御機能部４０は、図１８に示したように、プレイリスト情報に代えて選択広告コンテンツ特定情報を含むコンテンツ送信指示をコアＩＭＳ部３０を介してメディア機能部６０へ送信する（ステップＣ１７０１）。

【０２３５】

コンテンツ送信指示は、ＳＩＰメッセージのうちのＩＮＶＩＴＥメッセージとして送信される。図１９に示したように、ＩＮＶＩＴＥメッセージは、ヘッダ部ＨＤとボディ部ＢＤとを含む。本例では、選択広告コンテンツ特定情報ＡＤは、ＩＮＶＩＴＥメッセージのうちのヘッダ部ＨＤにてフィールド「Ｘ－ｖｉｄｅｏ－ａｄｖｅｒｔｉｓｅｍｅｎｔ」の値として含まれている。本例では、選択広告コンテンツ特定情報ＡＤは、「，」により区切られた広告コンテンツ識別情報を含む。

【０２３６】

このＩＮＶＩＴＥメッセージは、コアＩＭＳ部３０がユーザ端末２とメディア機能部６０との間の接続を確立するために、コアＩＭＳ部３０がユーザ端末２、サービス制御機能部４０及びメディア機能部６０のそれぞれとの間で授受する接続確立用メッセージの１つである。

【０２３７】

即ち、サービス制御機能部４０は、接続確立用メッセージに選択広告コンテンツ特定情報を含ませることにより、選択広告コンテンツ特定情報をコアＩＭＳ部３０を介してメディア機能部６０（メディアサーバ４ｂ）へ送信する、と言うことができる。

【０２３８】

換言すると、サービス制御機能部４０は、コアＩＭＳ部３０がユーザ端末２とメディア機能部６０との間の接続を確立するための処理を行う際に、選択広告コンテンツ特定情報を含むプレイリスト情報をコアＩＭＳ部３０を介してメディアサーバ４ｂへ送信する、と言うことができる。

【０２３９】

そして、メディア機能部６０は、コンテンツ送信指示を受信すると、受信したコンテンツ送信指示に含まれる選択広告コンテンツ特定情報を取得する。次いで、メディア機能部６０は、取得した選択広告コンテンツ特定情報に含まれる広告コンテンツ識別情報と、広告挿入情報記憶部６７に記憶されている挿入位置情報と、コンテンツ送信指示に含まれるメインコンテンツ識別情報と、に基づいてプレイリスト情報を生成する（ステップＤ１７０１）。

【０２４０】

次いで、メディア機能部６０は、生成したプレイリスト情報を含む送信許可通知を、第１実施形態に係るステップＤ５０１と同様に、コアＩＭＳ部３０を介してサービス制御機能部４０へ送信する（ステップＤ５０１）。

【０２４１】

そして、サービス制御機能部４０は、送信許可通知を受信すると、第１実施形態に係るステップＣ５０３と同様に、プレイリスト情報をコアＩＭＳ部３０を介してユーザ端末２へ送信する（選択広告コンテンツ特定情報送信工程）。更に、コンテンツ配信システム１は、第１実施形態に係るステップＣ５０３以降の処理と同様の処理を実行することにより、ユーザ端末２とメディアサーバ４ｂとの間の接続を確立するとともに、メディアサーバ４ｂからユーザ端末２へコンテンツデータを送信する。

【０２４２】

この第３実施形態によっても、上記第２実施形態と同様の作用及び効果を奏することが

できる。
【０２４３】
なお、本発明は上記各実施形態に限定されることはなく、本発明の範囲内において種々の変形例を採用することができる。例えば、上記各実施形態の他の変形例として、上述した実施形態及び変形例の任意の組み合わせが採用されてもよい。
【０２４４】
また、上記各実施形態の他の変形例において、図２０に示したように、コンテンツ配信システム１の機能は、コンテンツ記憶部ＲＣと、送信要求受信部１０１と、広告コンテンツ選択部１０２と、選択広告コンテンツ特定情報送信部１０３と、を含んでいてもよい。
【０２４５】
コンテンツ記憶部ＲＣは、広告コンテンツを表す広告コンテンツデータ、及び、メインコンテンツを表すメインコンテンツデータ、を記憶する。
送信要求受信部１０１は、メインコンテンツを識別するためのメインコンテンツ識別情報を含み且つユーザ端末２により送信されたコンテンツ送信要求を、接続制御システム３を介して受信する。
【０２４６】
広告コンテンツ選択部１０２は、広告コンテンツの属性を表す広告属性情報を含む広告選択用情報に基づいて、コンテンツ記憶部ＲＣにより記憶されている広告コンテンツデータを選択する。
選択広告コンテンツ特定情報送信部１０３は、広告コンテンツ選択部１０２により選択された広告コンテンツデータを特定する選択広告コンテンツ特定情報を、コンテンツ送信要求を送信してきたユーザ端末２へ、接続制御システム３を介して送信する。
【０２４７】
この変形例によっても、コンテンツ配信システム１は、広告選択用情報に基づいて選択された広告コンテンツを特定する選択広告コンテンツ特定情報をユーザ端末２へ送信する。従って、例えば、選択広告コンテンツ特定情報により特定される広告コンテンツが挿入された視聴用コンテンツを出力するようにユーザ端末２を構成し、且つ、メインコンテンツ（視聴希望コンテンツ）及び／又はユーザに応じて広告コンテンツを選択するようにアプリケーションサーバシステム４システムを構成することにより、メインコンテンツ及び／又はユーザに応じた広告コンテンツが挿入された視聴用コンテンツをユーザ端末２のユーザに視聴させることができる。
【０２４８】
また、上記各実施形態において、広告選択用情報は、ユーザ基礎情報及びコンテンツ基礎情報の両方を含んでいたが、ユーザ基礎情報及びコンテンツ基礎情報の一方のみを含んでいてもよい。
【０２４９】
また、上記各実施形態は、ユーザプロファイルサーバ機能部５０がユーザ基礎情報記憶部５１を含むように構成されていたが、ユーザプロファイルサーバ機能部５０に代えてサービス制御機能部４０がユーザ基礎情報記憶部５１を含むように構成されていてもよい。即ち、サービス制御機能部４０が、ユーザ識別情報と対応付けてユーザ基礎情報を記憶していてもよい。
【０２５０】
また、上記各実施形態において、広告選択用情報は、ユーザ基礎情報及びコンテンツ基礎情報を含んでいたが、ユーザ基礎情報及び／又はコンテンツ基礎情報に代えて、又は、ユーザ基礎情報及びコンテンツ基礎情報に加えて、ユーザ端末２の位置を表す端末位置情報、コンテンツ送信要求が送信された日時（曜日を含んでもよい）を表す送信日時情報、及び／又は、コンテンツ送信要求を送信したユーザの属性（例えば、ユーザの居住地、年齢、性別、身長、体重、及び／又は、職業等）を表すユーザ属性情報等を含んでいてもよい。更に、この場合、コンテンツ配信システム１は、コアＩＭＳ部３０が記憶している端末位置情報をメディア機能部６０へ送信するように構成されていてもよい。

【０２５１】
また、上記各実施形態において、プレイリスト情報に含まれるコンテンツ要素情報は、コンテンツ識別情報と、そのコンテンツ識別情報により識別されるコンテンツの再生開始位置及び再生終了位置と、の組からなっていたが、コンテンツ識別情報のみからなっていてもよい。この場合、コンテンツデータ記憶部６２により記憶されるコンテンツデータは、広告コンテンツが挿入される位置にて１つのメインコンテンツを分割することにより生成されたコンテンツのそれぞれを表すデータであることが好適である。
【０２５２】
また、上記各実施形態において、最終優先度は、ユーザ基礎情報に含まれる優先度情報が表す優先度と、コンテンツ基礎情報に含まれる優先度情報が表す優先度と、を合算することにより算出される。ところで、最終優先度は、ユーザ基礎情報に含まれる優先度情報が表す優先度に第１の係数を乗じた値と、コンテンツ基礎情報に含まれる優先度情報が表す優先度に第２の係数を乗じた値と、を合算することにより算出されてもよい。
【０２５３】
また、上記各実施形態は、選択される広告コンテンツと対応付けられた広告属性情報が、１つの広告属性情報（算出された最終優先度が最大である広告属性情報）のみからなるように構成されていたが、複数の広告属性情報を含むように構成されていてもよい。この場合、上記各実施形態は、算出された最終優先度が高い広告属性情報と対応付けられた広告コンテンツほど、優先して選択するように構成されていることが好適である。
【０２５４】
また、上記各実施形態の変形例は、サービス制御サーバ４ａ及びメディアサーバ４ｂに代えて、サービス制御サーバ４ａ及びメディアサーバ４ｂの両方の機能を有するサーバを備えていてもよい。
また、上記各実施形態の変形例は、サービス制御サーバ４ａ及びユーザ情報管理サーバ４ｃに代えて、サービス制御サーバ４ａ及びユーザ情報管理サーバ４ｃの両方の機能を有するサーバを備えていてもよい。
【０２５５】
また、上記各実施形態においては、メディアサーバ４ｂがメディア機能部６０のすべてを有していたが、第１のサーバがメディア機能部６０の一部（メディア制御機能部）を有するとともに第２のサーバがメディア機能部６０の残余の部分（メディア配信機能部）を有していてもよい。
また、上記各実施形態の変形例は、メディア機能部６０のうちのメディア配信機能部を有するサーバを複数備えていてもよい。
【０２５６】
また、上記各実施形態の変形例において、接続制御システム３は、複数の接続制御サーバ（接続制御サーバ３ａ，３ｂ等）を含んでいたが、１つの接続制御サーバのみを含んでいてもよい。
【０２５７】
また、上記各実施形態において、コンテンツ配信システム１は、プレイリスト情報又は広告属性情報を、ＳＩＰに従って送信するように構成されていたが、他の通信プロトコル（例えば、ＲＴＳＰ）に従って送信するように構成されていてもよい。
【０２５８】
なお、上記各実施形態において、ユーザ端末２は、セットトップボックスであったが、携帯電話装置、ＰＤＡ（Ｐｅｒｓｏｎａｌ　Ｄａｔａ　Ａｓｓｉｓｔａｎｃｅ）、スマートフォン、ＰＨＳ（Ｐｅｒｓｏｎａｌ　Ｈａｎｄｙｐｈｏｎｅ　Ｓｙｓｔｅｍ）、ゲーム機、カーナビゲーション装置、又は、パーソナル・コンピュータ等であってもよい。
また、上記各実施形態において、コンテンツは動画であったが、映像のみ又は音声のみであってもよい。
【０２５９】
また、上記各実施形態においては、コンテンツ配信システム１の構成要素は、ＩＭＳ（

ＩＰ　Ｍｕｌｔｉｍｅｄｉａ　Ｓｕｂｓｙｓｔｅｍ）を構成する構成要素として表現されていたが、ＭＭＳ（Ｍｕｌｔｉｍｅｄｉａ　Ｍｅｓｓａｇｉｎｇ　Ｓｅｒｖｉｃｅ）を構成する構成要素として表現されていてもよい。

【産業上の利用可能性】

【０２６０】

本発明は、ＩＰ網を介してコンテンツを配信するビデオオンデマンドシステム、及び、ＩＰ網を介してテレビ放送を行うＩＰＴＶシステム等に適用可能である。

【図面の簡単な説明】

【０２６１】

【図１】本発明の第１実施形態に係るコンテンツ配信システムの概略構成を表す図である。

【図２】図１に示したコンテンツ配信システムの機能の概略を表すブロック図である。

【図３】図１に示したユーザ情報管理サーバに記憶されているユーザ基礎情報を示したテーブルである。

【図４】図１に示したコンテンツ配信システムがユーザ端末及びユーザ端末のユーザを認証する際の作動を示したシーケンス図である。

【図５】図１に示したコンテンツ配信システムがユーザ端末のユーザの入力に応じて、視聴用コンテンツデータをユーザ端末へ送信する際の作動を示したシーケンス図である。

【図６】図１に示したコンテンツ配信システムがユーザ端末のユーザの入力に応じて、視聴用コンテンツデータをユーザ端末へ送信する際の作動を示したシーケンス図である。

【図７】コンテンツ送信指示を含むＩＮＶＩＴＥメッセージを示した図である。

【図８】第１実施形態の変形例に係る、コンテンツ送信指示を含むＩＮＶＩＴＥメッセージを示した図である。

【図９】第１実施形態の変形例に係る、コンテンツ送信指示を含むＩＮＶＩＴＥメッセージを示した図である。

【図１０】第１実施形態の変形例に係る、コンテンツ送信指示を含むＩＮＶＩＴＥメッセージを示した図である。

【図１１】第１実施形態の変形例に係る、コンテンツ送信指示を含むＩＮＶＩＴＥメッセージを示した図である。

【図１２】第１実施形態の第１変形例に係るコンテンツ配信システムがユーザ端末のユーザの入力に応じて、視聴用コンテンツデータをユーザ端末へ送信する際の作動を示したシーケンス図である。

【図１３】第１実施形態の第２変形例に係るコンテンツ配信システムがユーザ端末のユーザの入力に応じて、視聴用コンテンツデータをユーザ端末へ送信する際の作動を示したシーケンス図である。

【図１４】本発明の第２実施形態に係るコンテンツ配信システムの機能の概略を表すブロック図である。

【図１５】本発明の第２実施形態に係るコンテンツ配信システムがユーザ端末のユーザの入力に応じて、視聴用コンテンツデータをユーザ端末へ送信する際の作動を示したシーケンス図である。

【図１６】本発明の第２実施形態に係るコンテンツ送信指示を含むＩＮＶＩＴＥメッセージを示した図である。

【図１７】本発明の第３実施形態に係るコンテンツ配信システムの機能の概略を表すブロック図である。

【図１８】本発明の第３実施形態に係るコンテンツ配信システムがユーザ端末のユーザの入力に応じて、視聴用コンテンツデータをユーザ端末へ送信する際の作動を示したシーケンス図である。

【図１９】本発明の第３実施形態に係るコンテンツ送信指示を含むＩＮＶＩＴＥメッセージを示した図である。

【図２０】本発明による各実施形態の変形例に係るコンテンツ配信システムの機能の概略を表すブロック図である。

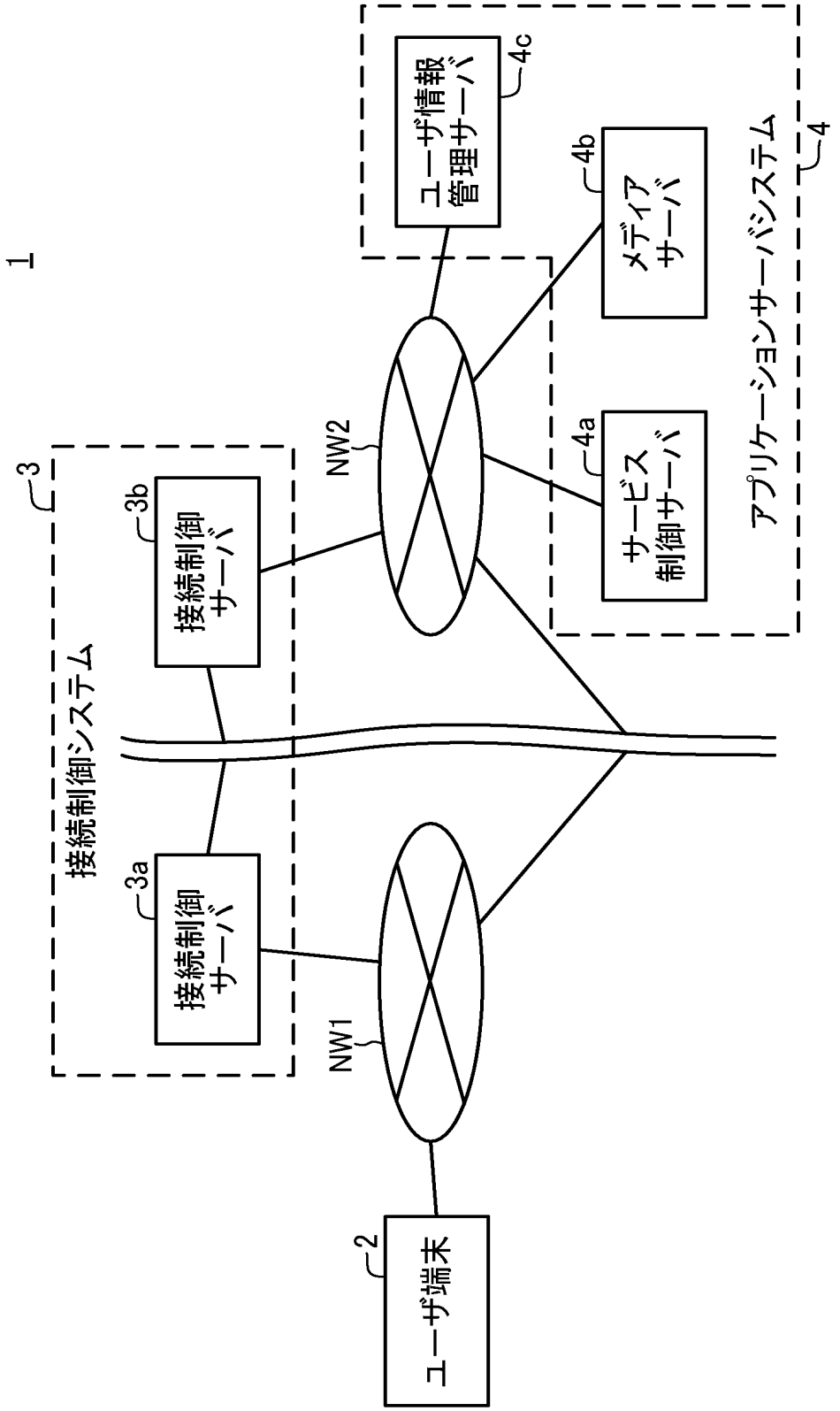
【符号の説明】

【０２６２】

１　　コンテンツ配信システム
２　　ユーザ端末
３　　接続制御システム
３ａ，３ｂ　接続制御サーバ
４　　アプリケーションサーバシステム
４ａ　　サービス制御サーバ
４ｂ　　メディアサーバ
４ｃ　　ユーザ情報管理サーバ
１１　　要求送信部
１２　　プレイリスト受信部
１３　　視聴要求送信部
１４　　コンテンツ出力部
３１　　呼接続制御部
３２　　ＩＭＳ認証部
４０　　サービス制御機能部
４１　　情報送受信部
４２　　コンテンツ基礎情報記憶部
４３　　広告属性情報記憶部
４４　　広告挿入情報記憶部
４５　　プレイリスト生成部
４６　　配信要求部
４７　　広告選択用情報取得部
４８　　広告コンテンツ選択部
５０　　ユーザプロファイルサーバ機能部
５１　　ユーザ基礎情報記憶部
６０　　メディア機能部
６１　　情報送受信部
６２　　コンテンツデータ記憶部
６３　　コンテンツ配信制御部
６５　　コンテンツ配信部
６６　　広告属性情報記憶部
６７　　広告挿入情報記憶部
６８　　プレイリスト生成部
８０　　トランスポート機能部
８１　　帯域確保部
８２　　端末認証部
１０１　送信要求受信部
１０２　広告コンテンツ選択部
１０３　選択広告コンテンツ特定情報送信部
ＡＤ　　選択広告コンテンツ特定情報
ＢＤ　　ボディ部
ＢＤ１　第１の部分
ＢＤ２　第２の部分
ＣＩ　　コンテンツ基礎情報

ＨＤ　　ヘッダ部
ＮＷ１　ユーザ側通信回線
ＮＷ２　サービス提供者側通信回線
ＰＬ　　プレイリスト情報
ＲＣ　　コンテンツ記憶部
ＵＩ　　ユーザ基礎情報

【書類名】図面
【図１】


1
2
ユーザ端末
NW1
NW2
3
接続制御システム
3a
接続制御サーバ
3b
接続制御サーバ
4
アプリケーションサーバシステム
4a
サービス制御サーバ
4b
メディアサーバ
4c
ユーザ情報管理サーバ

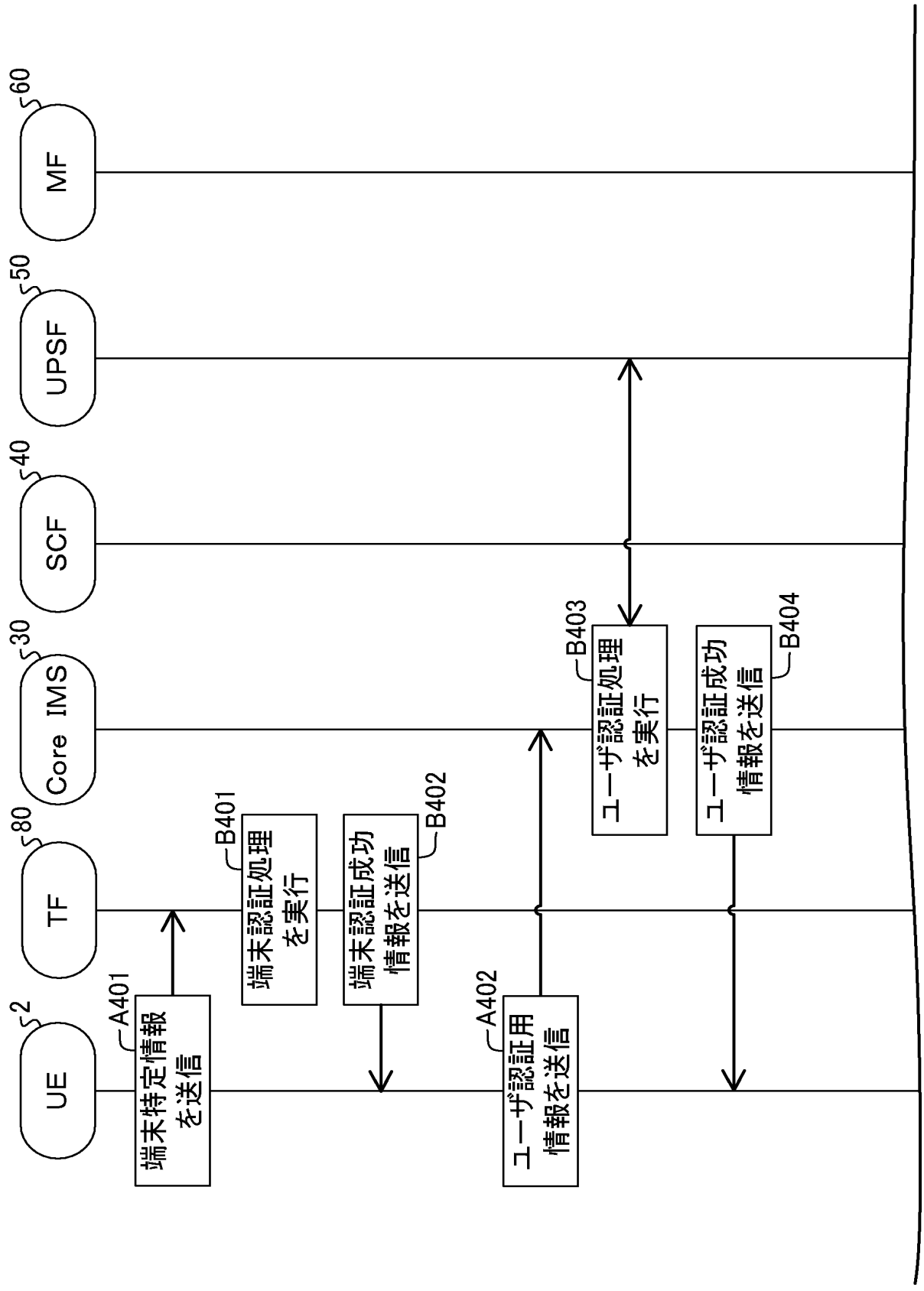
【図２】

メディア機能部(MF)
60
コンテンツデータ記憶部
62
情報送受信部
61
コンテンツ配信部
65
コンテンツ配信制御部
63
サービス制御機能部(SCF)
40
広告挿入情報記憶部
44
広告属性情報記憶部
43
コンテンツ基礎情報記憶部
42
プレイリスト生成部
45
配信要求部
46
情報送受信部
41
コアIMS部(Core IMS)
30
呼接続制御部
31
IMS認証部
32
トランスポート機能部
80
帯域確保部
81
端末認証部
82
ユーザプロファイルサーバ機能部(UPSF)
50
ユーザ基礎情報記憶部
51
ユーザ端末(UE)
2
要求送信部
11
プレイリスト受信部
12
視聴要求送信部
13
コンテンツ出力部
14

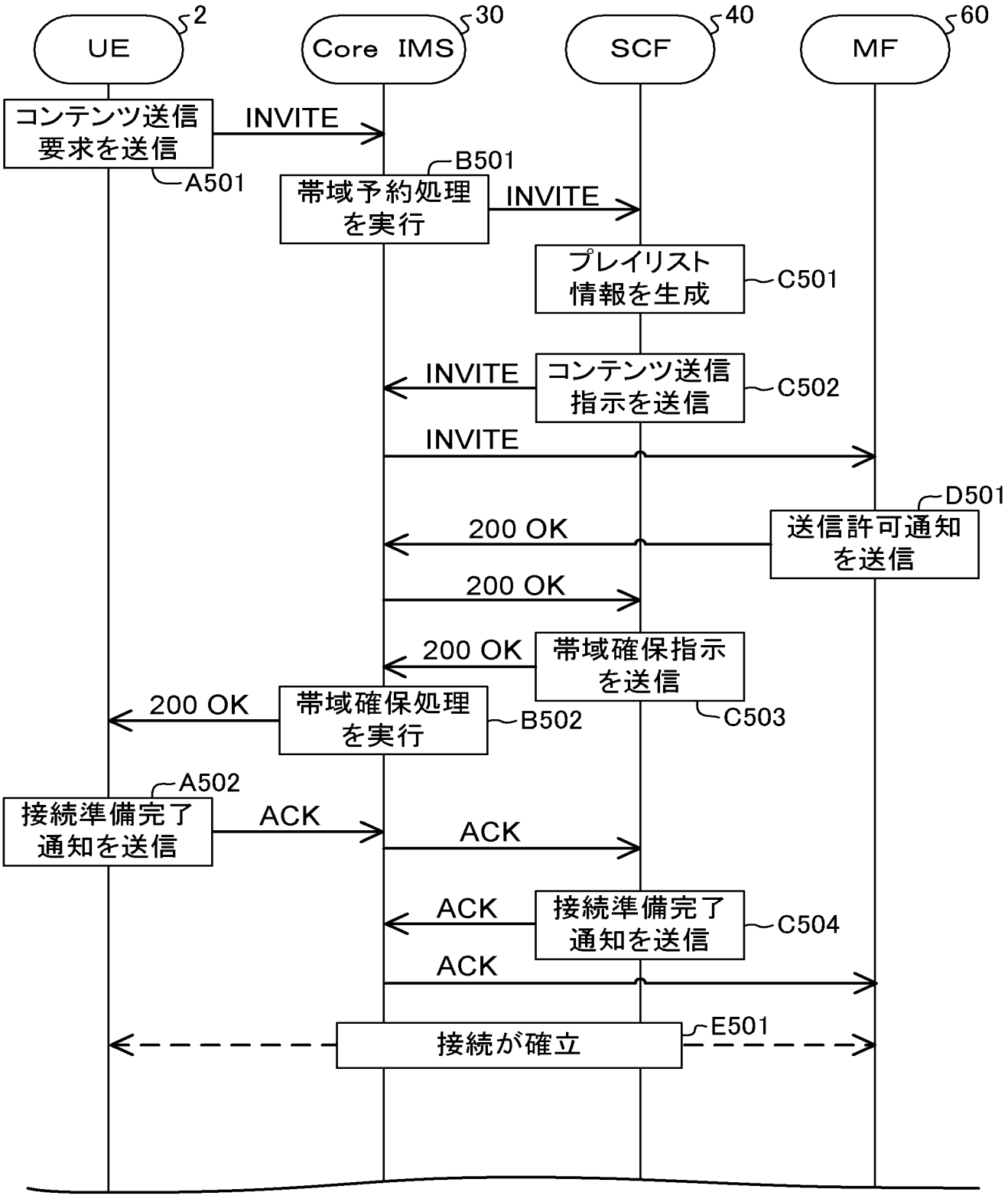
【図３】

広告属性情報	優先度情報
自動車	１
不動産	２
旅行	４
保険	５
携帯電話	３
コーヒー	３
小道具	４
⋮	⋮

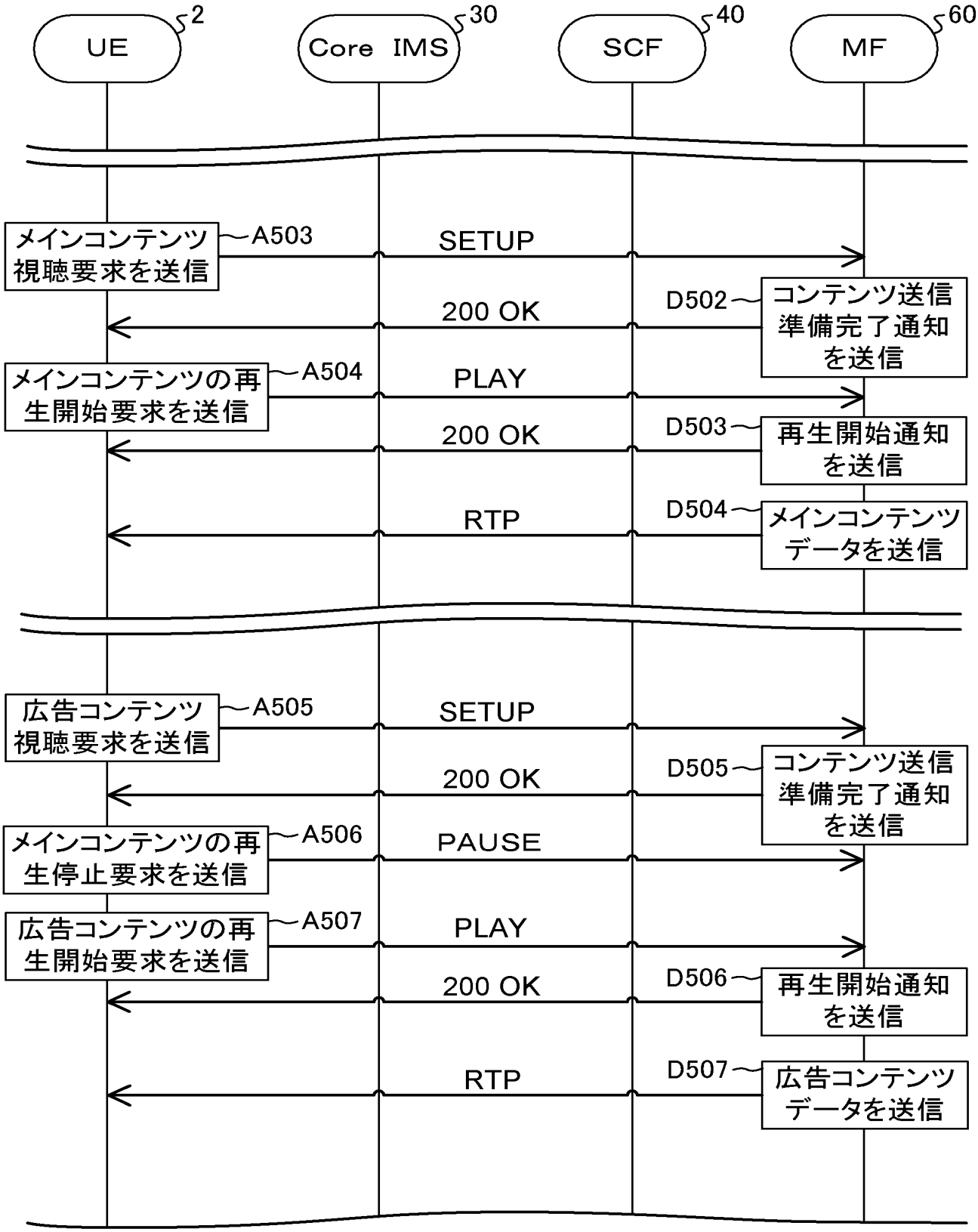
【図４】


UE
2
TF
80
Core IMS
30
SCF
40
UPSF
50
MF
60
A401
端末特定情報を送信
B401
端末認証処理を実行
B402
端末認証成功情報を送信
A402
ユーザ認証用情報を送信
B403
ユーザ認証処理を実行
B404
ユーザ認証成功情報を送信

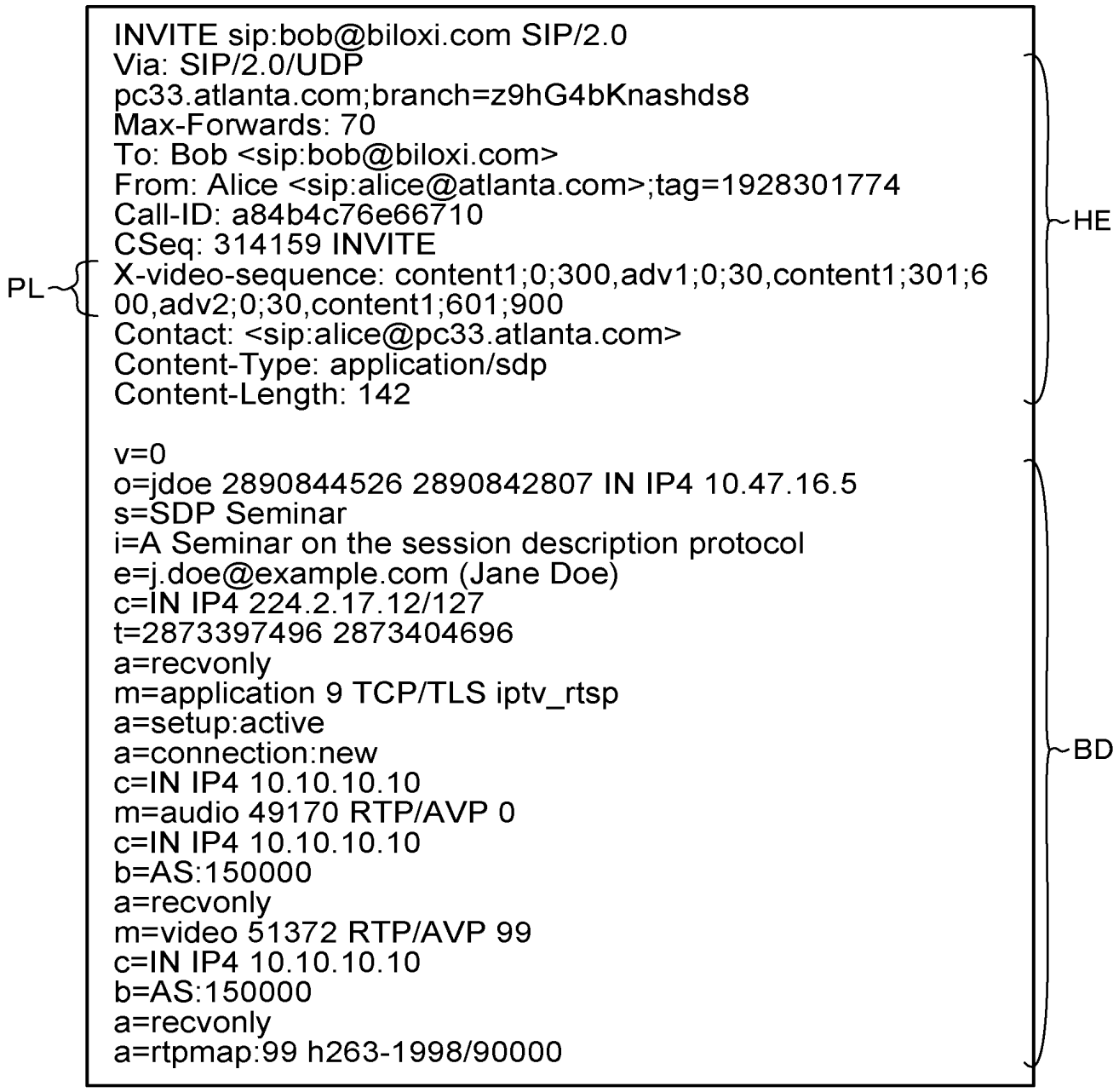
【図５】


UE
2
Core IMS
30
SCF
40
MF
60
コンテンツ送信
要求を送信
INVITE
A501
B501
帯域予約処理
を実行
INVITE
プレイリスト
情報を生成
C501
INVITE
コンテンツ送信
指示を送信
C502
INVITE
D501
200 OK
送信許可通知
を送信
200 OK
200 OK
帯域確保指示
を送信
C503
200 OK
帯域確保処理
を実行
B502
A502
接続準備完了
通知を送信
ACK
ACK
ACK
接続準備完了
通知を送信
C504
ACK
E501
接続が確立

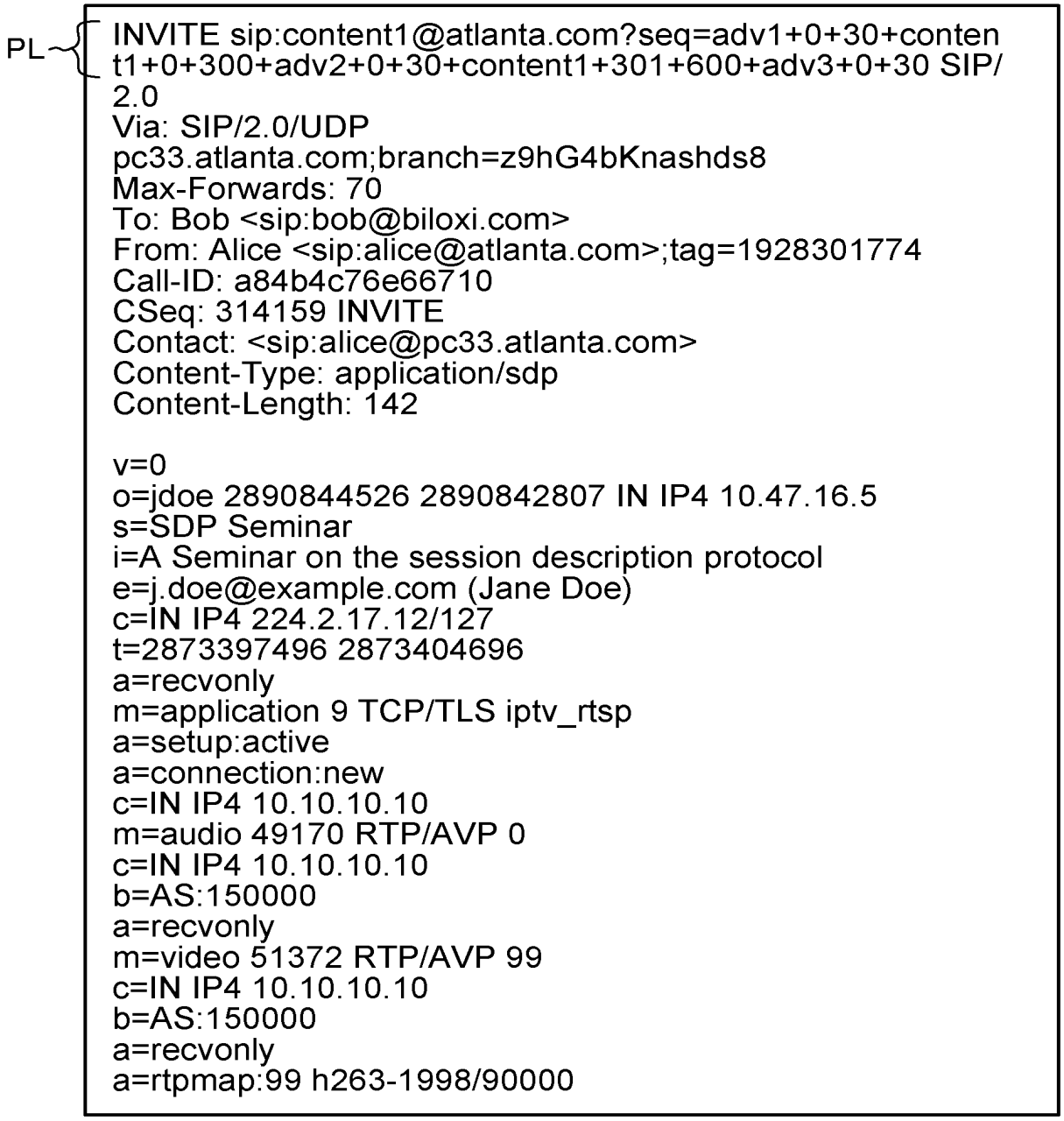
【図６】


UE
2
Core IMS
30
SCF
40
MF
60
メインコンテンツ視聴要求を送信
A503
SETUP
200 OK
D502
コンテンツ送信準備完了通知を送信
メインコンテンツの再生開始要求を送信
A504
PLAY
200 OK
D503
再生開始通知を送信
RTP
D504
メインコンテンツデータを送信
広告コンテンツ視聴要求を送信
A505
SETUP
200 OK
D505
コンテンツ送信準備完了通知を送信
メインコンテンツの再生停止要求を送信
A506
PAUSE
広告コンテンツの再生開始要求を送信
A507
PLAY
200 OK
D506
再生開始通知を送信
RTP
D507
広告コンテンツデータを送信

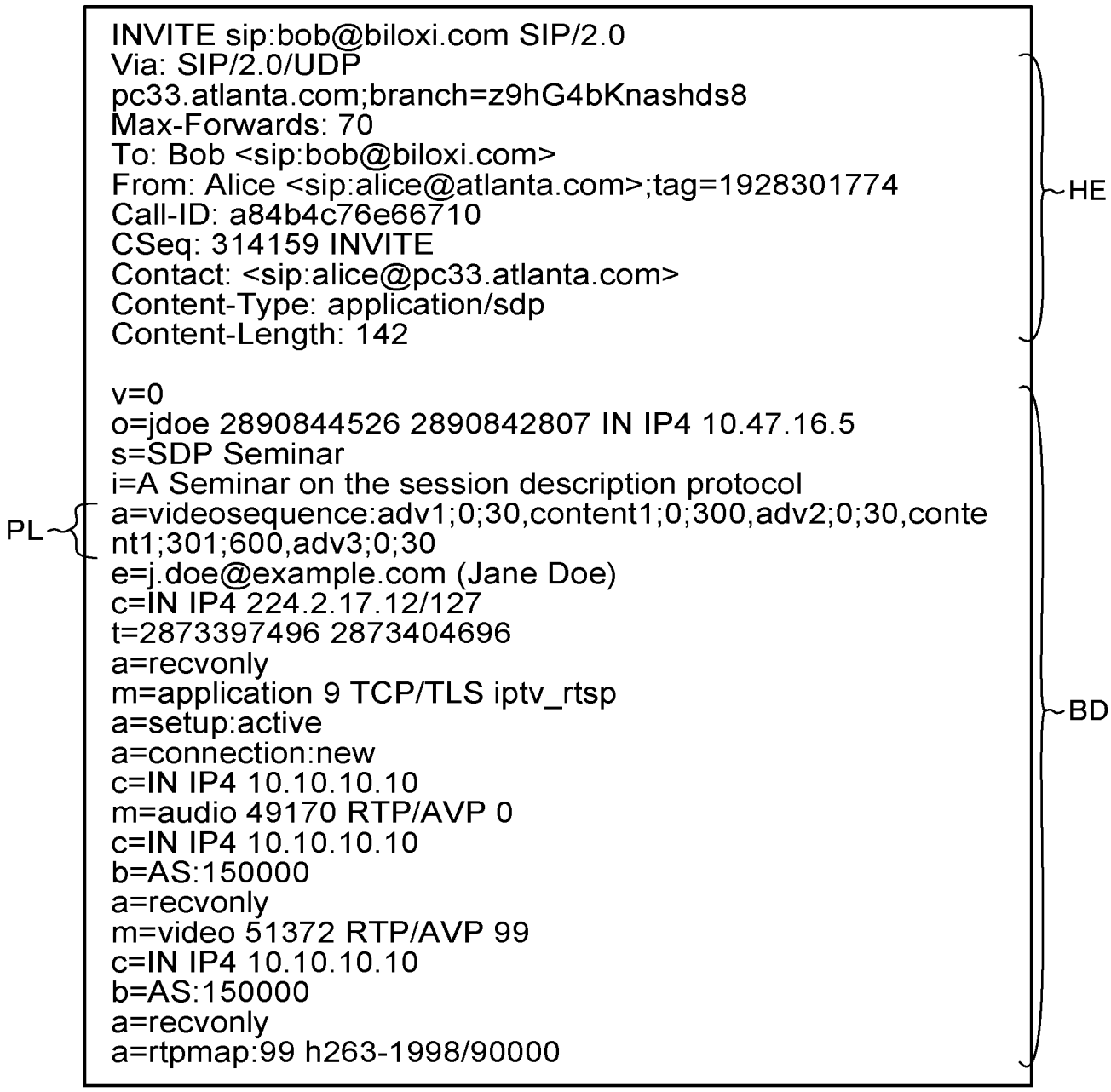
【図７】


INVITE sip:bob@biloxi.com SIP/2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
X-video-sequence: content1;0;300,adv1;0;30,content1;301;6
00,adv2;0;30,content1;601;900
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: application/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000
HE
PL
BD

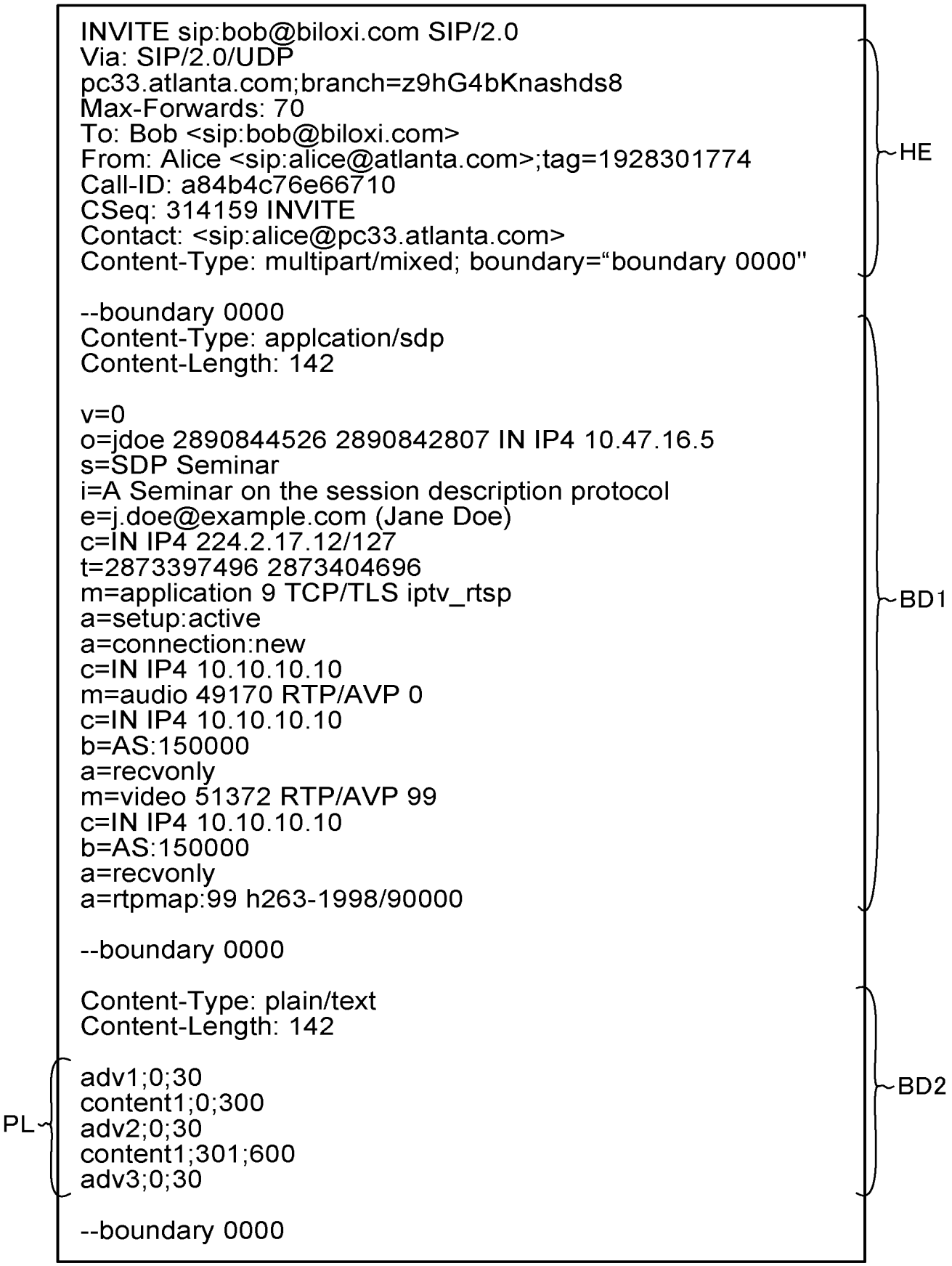
【図８】


PL
INVITE sip:content1@atlanta.com?seq=adv1+0+30+conten
t1+0+300+adv2+0+30+content1+301+600+adv3+0+30 SIP/
2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: application/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000

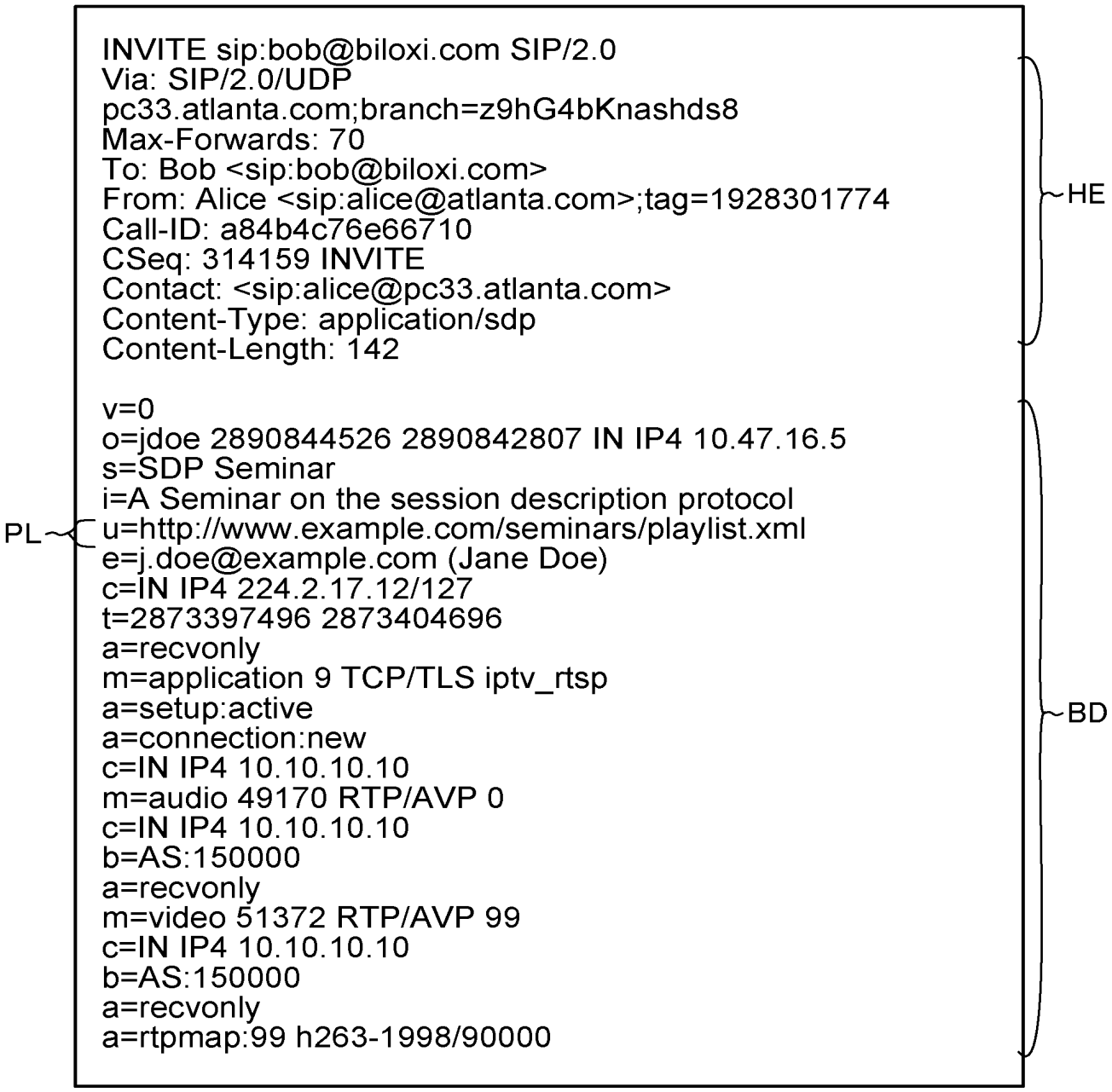
【図９】


INVITE sip:bob@biloxi.com SIP/2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: application/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
a=videosequence:adv1;0;30,content1;0;300,adv2;0;30,conte
nt1;301;600,adv3;0;30
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000
HE
PL
BD

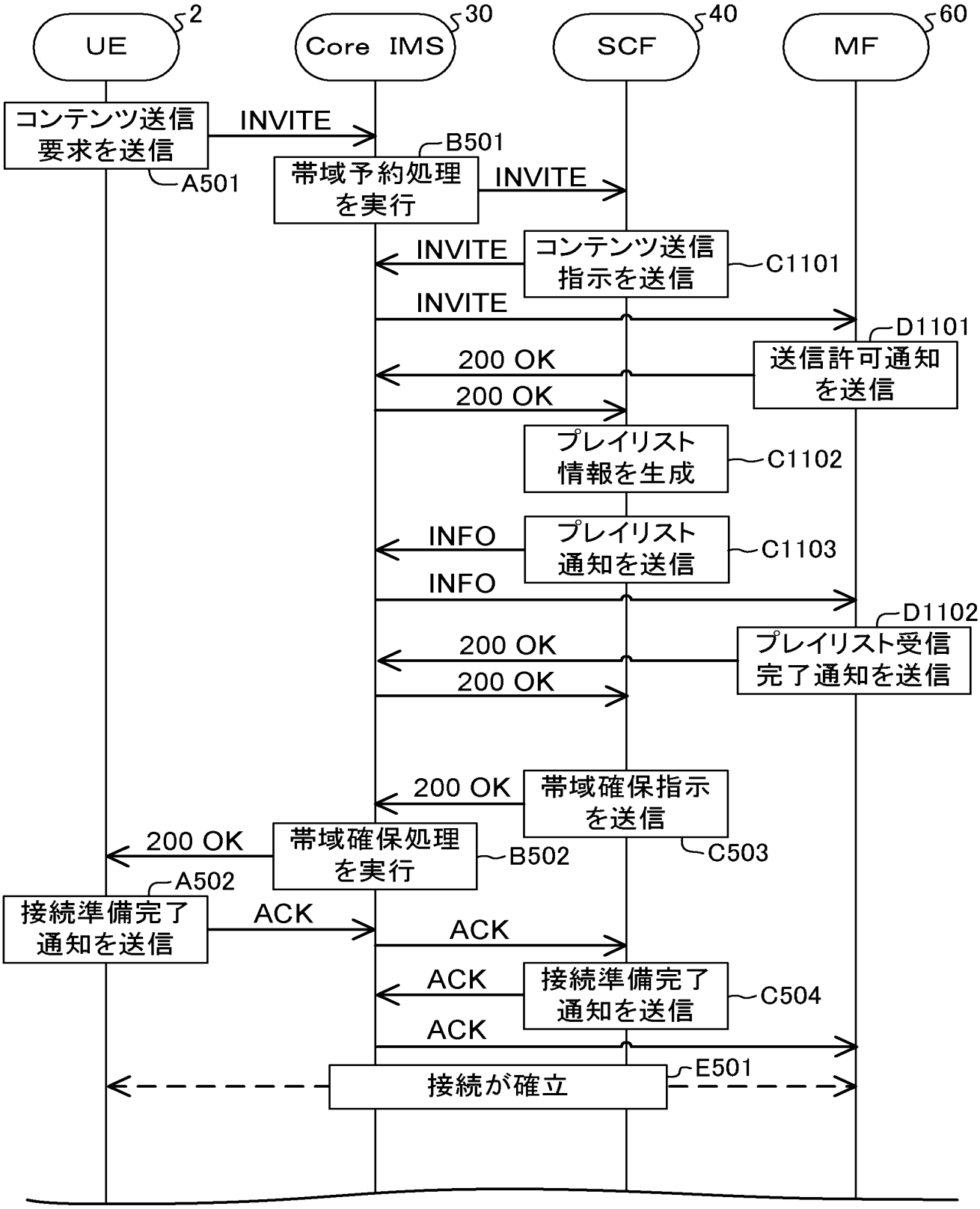
【図１０】


INVITE sip:bob@biloxi.com SIP/2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: multipart/mixed; boundary="boundary 0000"
HE
--boundary 0000
Content-Type: applcation/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000
BD1
--boundary 0000
Content-Type: plain/text
Content-Length: 142
adv1;0;30
content1;0;300
adv2;0;30
content1;301;600
adv3;0;30
PL
BD2
--boundary 0000

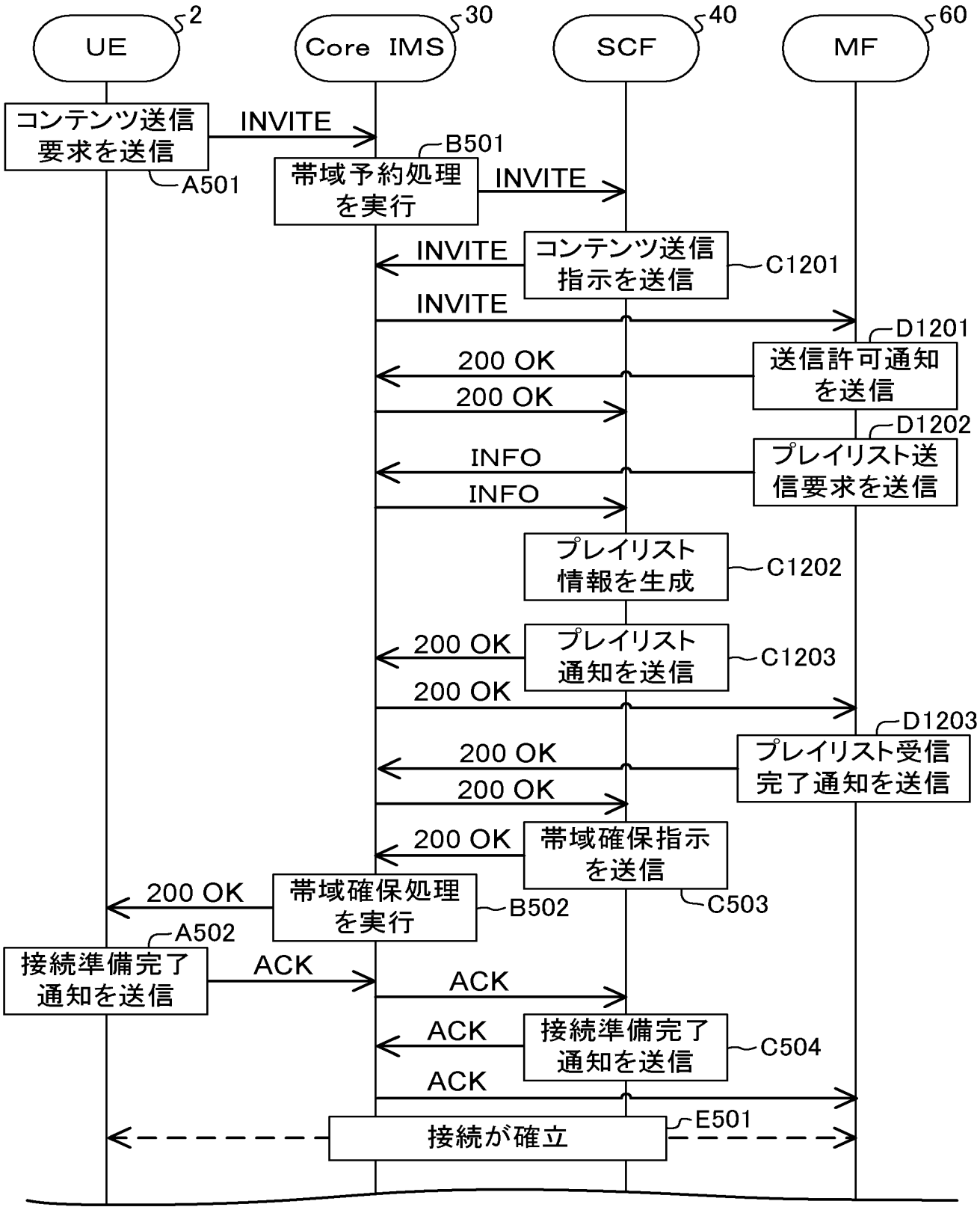
【図１１】


INVITE sip:bob@biloxi.com SIP/2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: application/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
u=http://www.example.com/seminars/playlist.xml
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000
HE
PL
BD

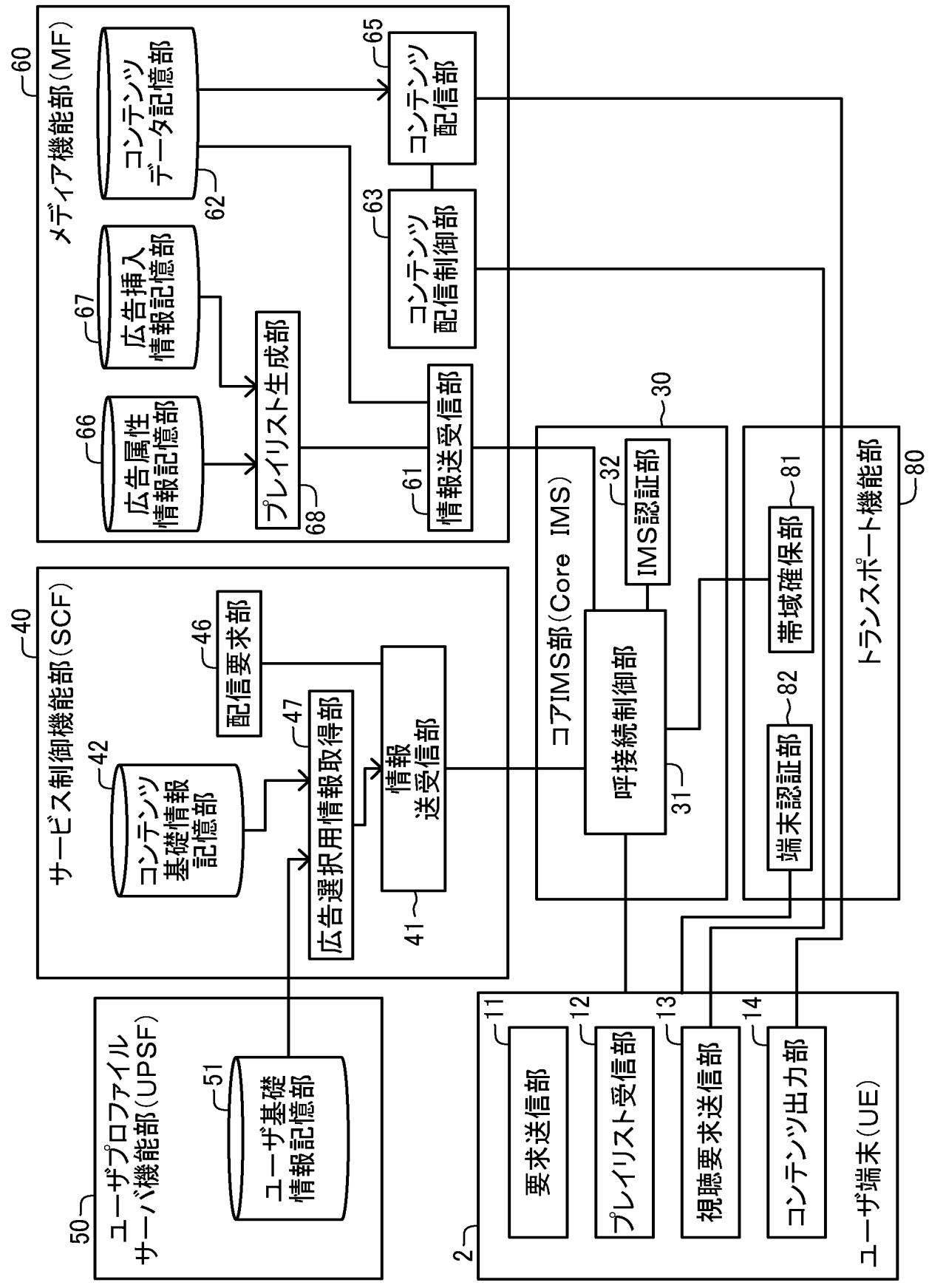
【図１２】


UE
2
Core IMS
30
SCF
40
MF
60
コンテンツ送信
要求を送信
INVITE
A501
B501
帯域予約処理
を実行
INVITE
INVITE
コンテンツ送信
指示を送信
C1101
INVITE
D1101
200 OK
送信許可通知
を送信
200 OK
プレイリスト
情報を生成
C1102
INFO
プレイリスト
通知を送信
C1103
INFO
D1102
200 OK
プレイリスト受信
完了通知を送信
200 OK
200 OK
帯域確保指示
を送信
C503
200 OK
帯域確保処理
を実行
B502
A502
接続準備完了
通知を送信
ACK
ACK
ACK
接続準備完了
通知を送信
C504
ACK
E501
接続が確立

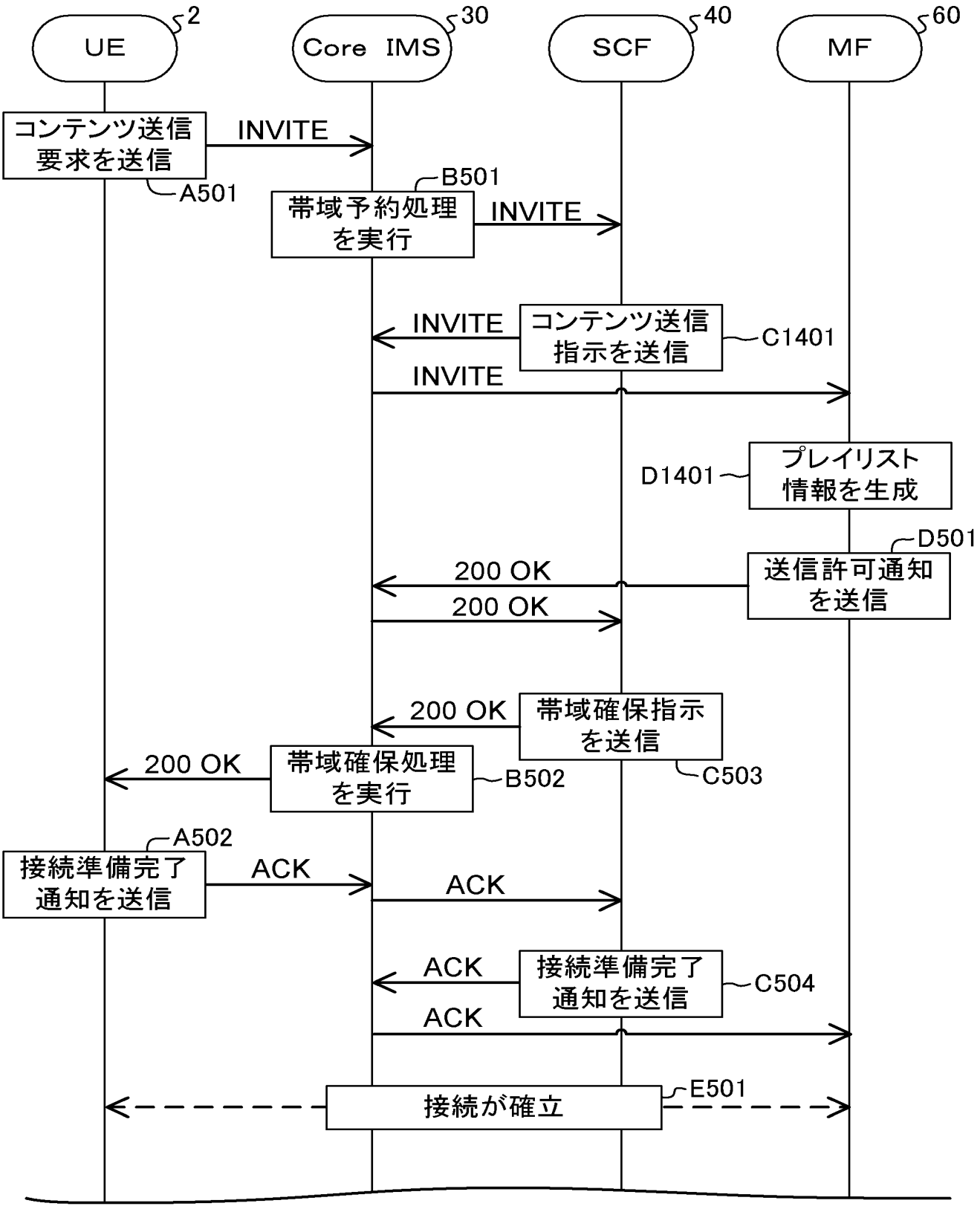
【図１３】


UE
2
Core IMS
30
SCF
40
MF
60
コンテンツ送信
要求を送信
INVITE
A501
B501
帯域予約処理
を実行
INVITE
INVITE
コンテンツ送信
指示を送信
C1201
INVITE
D1201
200 OK
送信許可通知
を送信
200 OK
D1202
INFO
プレイリスト送
信要求を送信
INFO
プレイリスト
情報を生成
C1202
200 OK
プレイリスト
通知を送信
C1203
200 OK
D1203
200 OK
プレイリスト受信
完了通知を送信
200 OK
200 OK
帯域確保指示
を送信
C503
200 OK
帯域確保処理
を実行
B502
A502
接続準備完了
通知を送信
ACK
ACK
ACK
接続準備完了
通知を送信
C504
ACK
E501
接続が確立

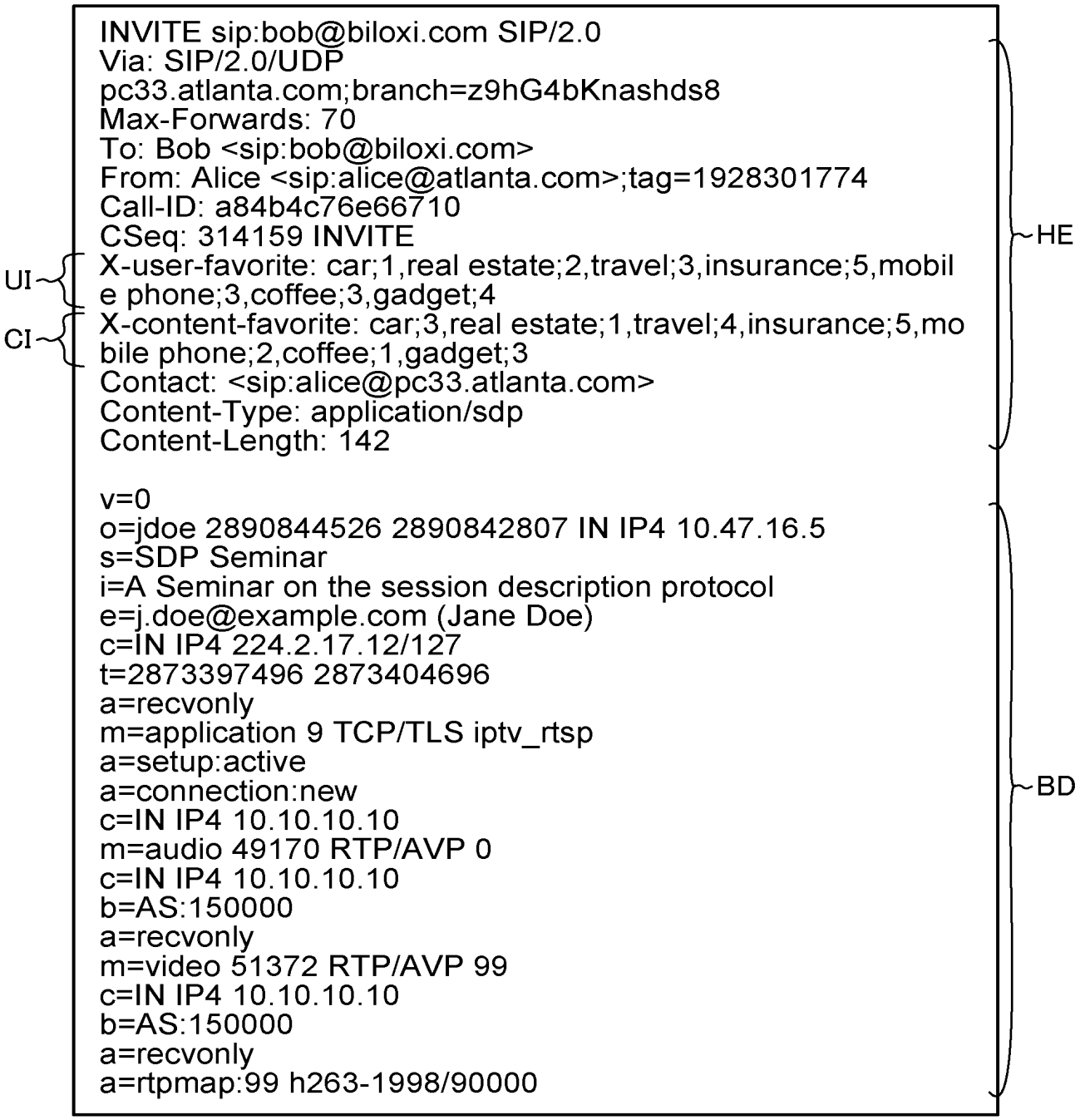
【図１４】


メディア機能部（MF）
60
コンテンツデータ記憶部
62
広告挿入情報記憶部
67
広告属性情報記憶部
66
プレイリスト生成部
68
コンテンツ配信部
65
コンテンツ配信制御部
63
情報送受信部
61
サービス制御機能部（SCF）
40
配信要求部
46
コンテンツ基礎情報記憶部
42
広告選択用情報取得部
47
情報送受信部
41
コアIMS部（Core IMS）
30
呼接続制御部
31
IMS認証部
32
トランスポート機能部
80
帯域確保部
81
端末認証部
82
ユーザプロファイルサーバ機能部（UPSF）
50
ユーザ基礎情報記憶部
51
ユーザ端末（UE）
2
要求送信部
11
プレイリスト受信部
12
視聴要求送信部
13
コンテンツ出力部
14

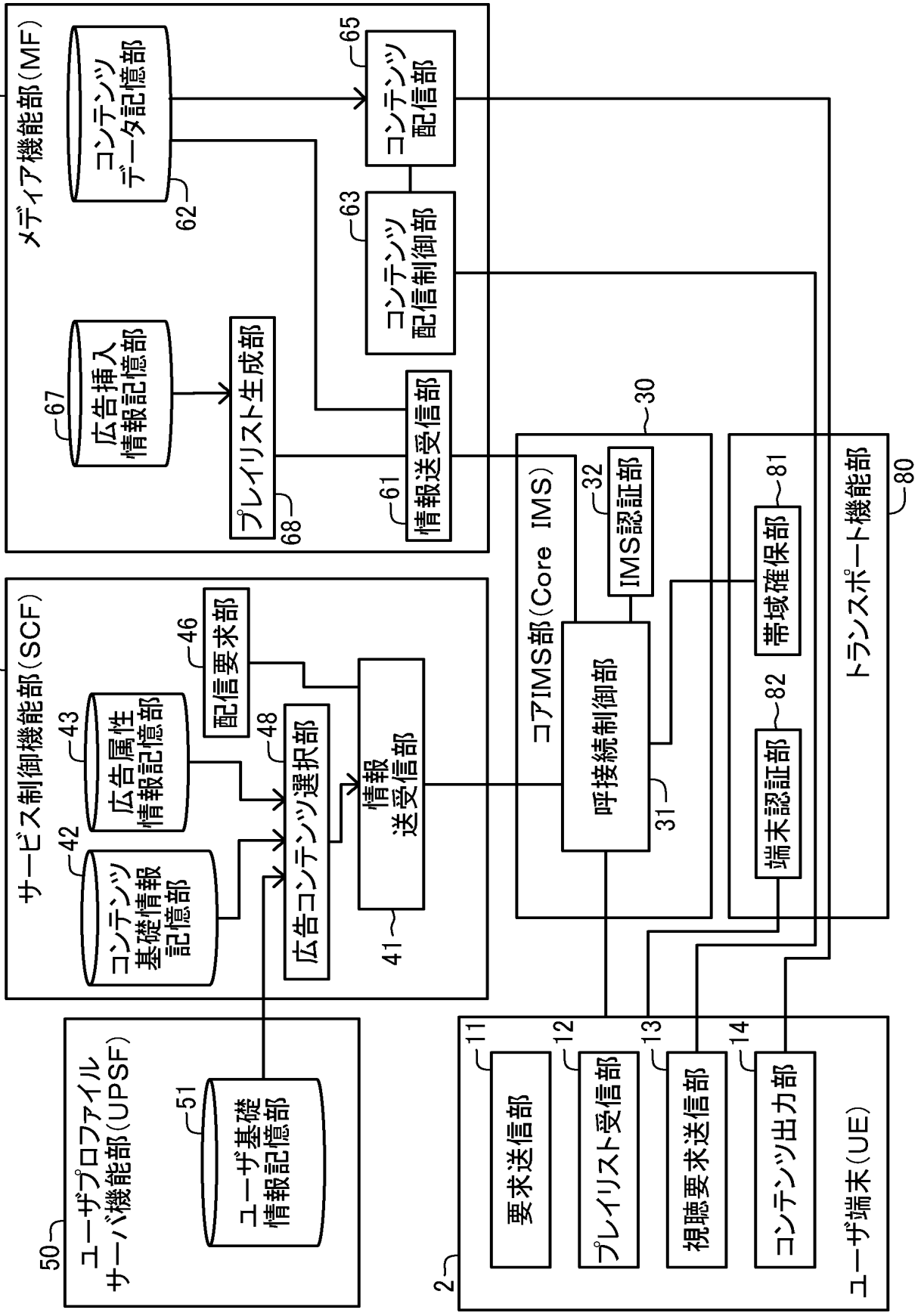
【図１５】


UE
2
Core IMS
30
SCF
40
MF
60
コンテンツ送信
要求を送信
INVITE
A501
B501
帯域予約処理
を実行
INVITE
INVITE
コンテンツ送信
指示を送信
C1401
INVITE
D1401
プレイリスト
情報を生成
D501
200 OK
送信許可通知
を送信
200 OK
200 OK
帯域確保指示
を送信
C503
200 OK
帯域確保処理
を実行
B502
A502
接続準備完了
通知を送信
ACK
ACK
ACK
接続準備完了
通知を送信
C504
ACK
E501
接続が確立

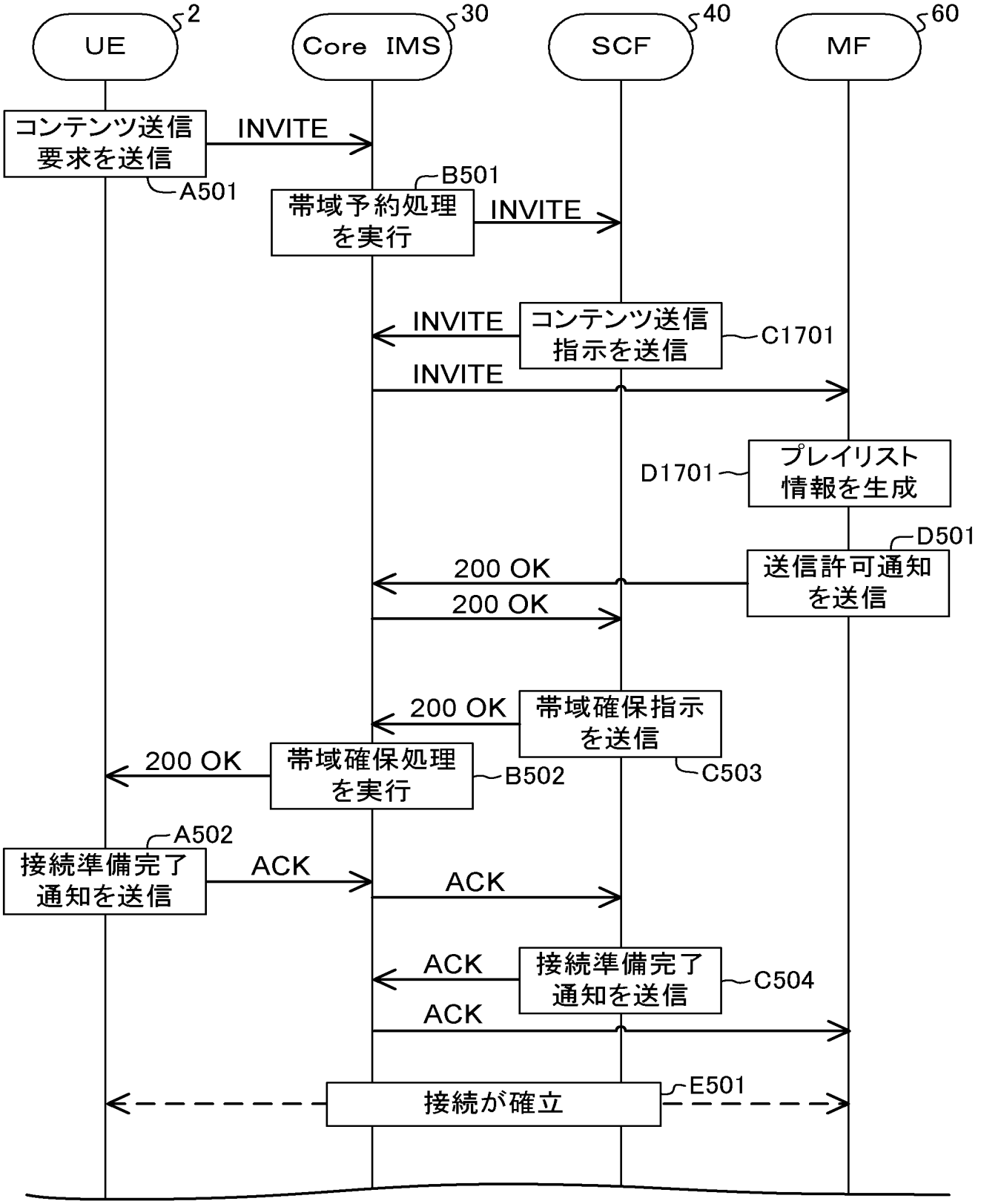
【図１６】


INVITE sip:bob@biloxi.com SIP/2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
X-user-favorite: car;1,real estate;2,travel;3,insurance;5,mobil
e phone;3,coffee;3,gadget;4
X-content-favorite: car;3,real estate;1,travel;4,insurance;5,mo
bile phone;2,coffee;1,gadget;3
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: application/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000
UI
CI
HE
BD

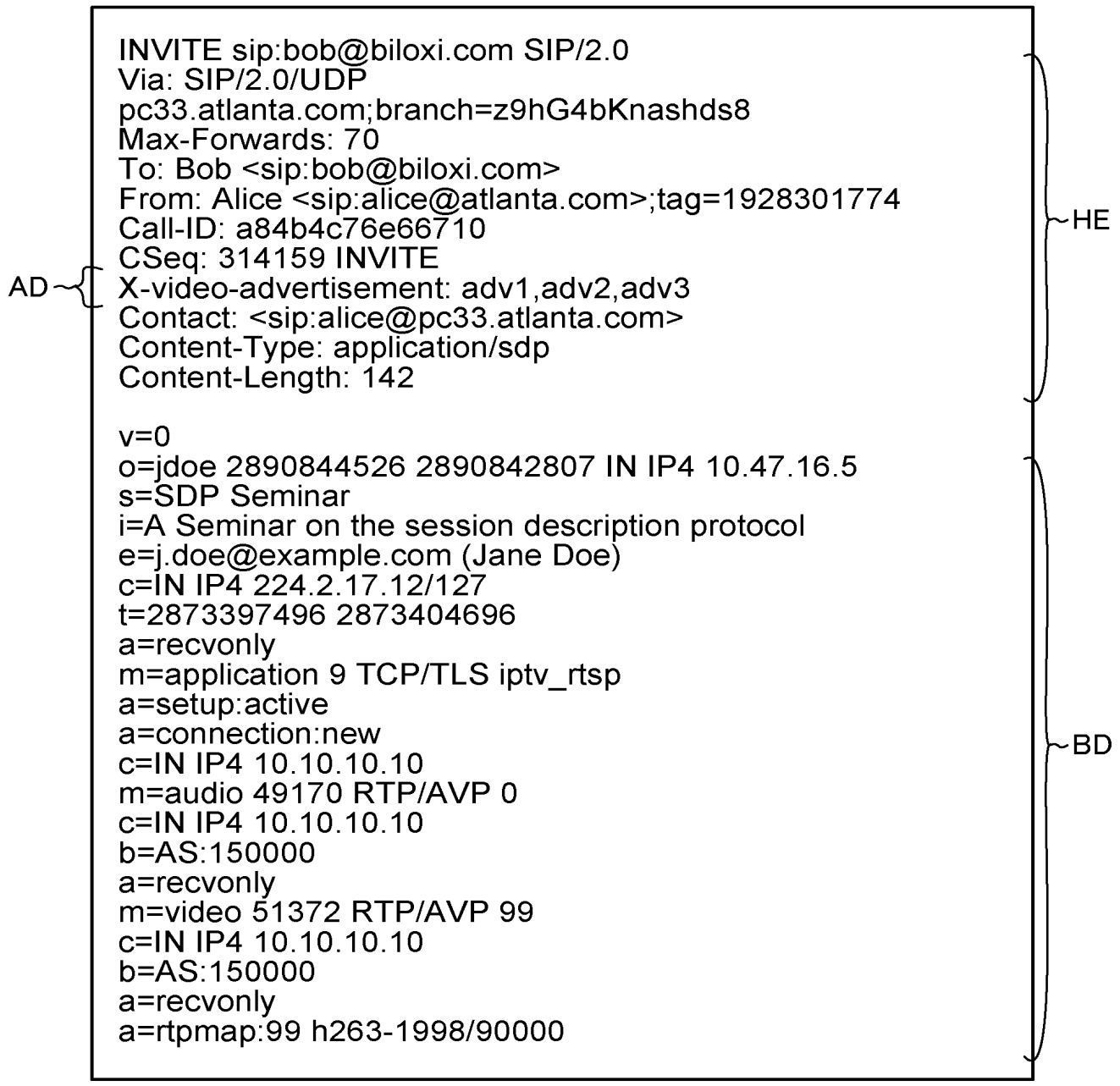
【図１７】


メディア機能部(MF)
60
コンテンツデータ記憶部
62
コンテンツ配信部
65
コンテンツ配信制御部
63
広告挿入情報記憶部
67
プレイリスト生成部
68
情報送受信部
61
サービス制御機能部(SCF)
40
広告属性情報記憶部
43
配信要求部
46
コンテンツ基礎情報記憶部
42
広告コンテンツ選択部
48
情報送受信部
41
コアIMS部(Core IMS)
30
IMS認証部
32
呼接続制御部
31
帯域確保部
81
端末認証部
82
トランスポート機能部
80
ユーザプロファイルサーバ機能部(UPSF)
50
ユーザ基礎情報記憶部
51
ユーザ端末(UE)
2
要求送信部
11
プレイリスト受信部
12
視聴要求送信部
13
コンテンツ出力部
14

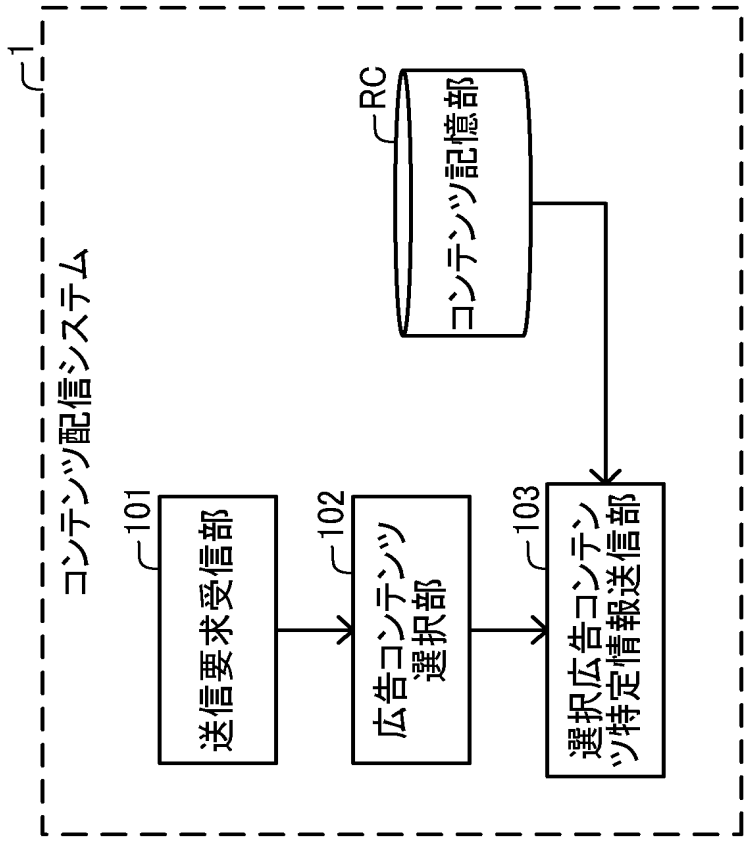
【図１８】


UE
2
Core IMS
30
SCF
40
MF
60
コンテンツ送信
要求を送信
INVITE
A501
B501
帯域予約処理
を実行
INVITE
INVITE
コンテンツ送信
指示を送信
C1701
INVITE
D1701
プレイリスト
情報を生成
D501
200 OK
送信許可通知
を送信
200 OK
200 OK
帯域確保指示
を送信
C503
200 OK
帯域確保処理
を実行
B502
A502
接続準備完了
通知を送信
ACK
ACK
ACK
接続準備完了
通知を送信
C504
ACK
E501
接続が確立

【図１９】


INVITE sip:bob@biloxi.com SIP/2.0
Via: SIP/2.0/UDP
pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
X-video-advertisement: adv1,adv2,adv3
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: application/sdp
Content-Length: 142
v=0
o=jdoe 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Seminar
i=A Seminar on the session description protocol
e=j.doe@example.com (Jane Doe)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=application 9 TCP/TLS iptv_rtsp
a=setup:active
a=connection:new
c=IN IP4 10.10.10.10
m=audio 49170 RTP/AVP 0
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
m=video 51372 RTP/AVP 99
c=IN IP4 10.10.10.10
b=AS:150000
a=recvonly
a=rtpmap:99 h263-1998/90000
AD
HE
BD

【図２０】


1
コンテンツ配信システム
RC
コンテンツ記憶部
101
送信要求受信部
102
広告コンテンツ選択部
103
選択広告コンテンツ特定情報送信部

【書類名】要約書
【要約】
【課題】視聴希望コンテンツ及び／又はユーザに応じた広告コンテンツをユーザに視聴させることが可能なコンテンツ配信システムを提供すること。
【解決手段】このシステム１は、アプリケーションサーバシステム（ＡＰシステム）４と接続制御システム３とを含む。接続制御システム３は、ユーザ端末２により送信された端末特定情報に基づいてＡＰシステム４とユーザ端末２との間の接続を確立する。ＡＰシステム４は、ユーザ端末２により送信され且つメインコンテンツを識別する情報を含むコンテンツ送信要求を受信する。ＡＰシステム４は、広告選択用情報に基づいて広告コンテンツを選択する。ＡＰシステム４は、選択された広告コンテンツを特定する情報をユーザ端末２へ送信する。
【選択図】図１

出願人履歴

０００００４２３７

19900829

新規登録

東京都港区芝五丁目７番１号

日本電気株式会社