

**PATENT
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

CHANGE OF ENTITY STATUS PURSUANT TO 37 C.F.R. §1.27 (g)(2)

Commissioner for Patents
Mail Stop M Correspondence
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This communication hereby notifies the United States Patent and Trademark Office that Small Entity status is no longer applicable to the patents identified in the attached Schedule A.

Respectfully submitted by:



Authorised Signatory*

Address of Signatory or Company*

____ N. Harris Computer Corp. ____
____ 1 Antares Drive, Suite 100 ____
____ Ottawa Ontario K2E 8C4 ____

____ Todd Richardson ____
Print Name*

____ Chief Financial Officer ____
Title* (Owner, Inventor, Assignee or US Attorney)

____ April 28, 2020 ____
Date*

**Please note that all fields* must be completed and the form signed by the
authorised Owner, Inventor, Assignee or US Attorney.**



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.
13/755,099	12/01/2015	9204099	28319-US	1447

23553 7590 11/11/2015
MARKS & CLERK
P.O. BOX 957
STATION B
OTTAWA, ON K1P 5S7
CANADA

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 92 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):

David Brown, Nepean, CANADA;
MAGOR COMMUNICATONS CORPORATION, Ottawa, CANADA

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)

23553 7590 07/28/2015
MARKS & CLERK
P.O. BOX 957
STATION B
OTTAWA, ON K1P 5S7
CANADA

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.
13/755,099	01/31/2013	David Brown	28319-US	1447

TITLE OF INVENTION: VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$480	\$0	\$0	\$480	10/28/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
EL-ZOOBI, MARIA	2656	348-014010

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. **MARKS & CLERK**

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)

MAGOR COMMUNICATIONS CORPORATION

OTTAWA, ON, CANADA

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 **13-1717** (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
- ☐ Applicant asserting small entity status. See 37 CFR 1.27
- ☐ Applicant changing to regular undiscounted fee status.

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.

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.

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 **October 26, 2015**

Typed or printed name **Hetal Kushwaha**

Registration No. **58,187**

Electronic Patent Application Fee Transmittal				
Application Number:		13755099		
Filing Date:		31-Jan-2013		
Title of Invention:		VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT		
First Named Inventor/Applicant Name:		David Brown		
Filer:		Richard J. Mitchell/Carolynn Irvin		
Attorney Docket Number:		28319-US		
Filed as Small Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Utility Appl Issue Fee	2501	1	480	480
Publ. Fee- Early, Voluntary, or Normal	1504	1	0	0
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				480

Electronic Acknowledgement Receipt	
EFS ID:	23883854
Application Number:	13755099
International Application Number:	
Confirmation Number:	1447
Title of Invention:	VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT
First Named Inventor/Applicant Name:	David Brown
Customer Number:	23553
Filer:	Richard J. Mitchell/Carolynn Irvin
Filer Authorized By:	Richard J. Mitchell
Attorney Docket Number:	28319-US
Receipt Date:	26-OCT-2015
Filing Date:	31-JAN-2013
Time Stamp:	09:06:45
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$480
RAM confirmation Number	7691
Deposit Account	131717
Authorized User	MARKS & CLERK
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. Section 1.16 (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)	

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	Issue Fee Payment (PTO-85B)	IF.pdf	126068 b2dfb0b02792fc5019debafe1ddc81827a288e20	no	1

Warnings:

Information:

2	Fee Worksheet (SB06)	fee-info.pdf	32470 f09738ea1763099d269f75536a80d831b2adba	no	2
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Warnings:

Information:

Total Files Size (in bytes): 158538

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.

Issue Classification 	Application/Control No. 13755099	Applicant(s)/Patent Under Reexamination BROWN, DAVID
	Examiner MARIA EL-ZOOBI	Art Unit 2656

CPC					Type	Version
Symbol						
H04N		7		152	F	2013-01-01

CPC Combination Sets					Type	Set	Ranking	Version
Symbol								

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	10	
/MARIA EL-ZOOBI/ Primary Examiner. Art Unit 2656	7/21/2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	15	1

Issue Classification 	Application/Control No. 13755099	Applicant(s)/Patent Under Reexamination BROWN, DAVID
	Examiner MARIA EL-ZOOBI	Art Unit 2656

US ORIGINAL CLASSIFICATION						INTERNATIONAL CLASSIFICATION													
CLASS		SUBCLASS				CLAIMED					NON-CLAIMED								
348		14.01				H	0	4	N	7 / 14 (2006.01.01)									
CROSS REFERENCE(S)																			
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)																		
709	204																		

NONE		Total Claims Allowed:	
		10	
(Assistant Examiner)	(Date)		
/MARIA EL-ZOOBI/ Primary Examiner. Art Unit 2656	7/21/2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	15	1

Issue Classification 	Application/Control No. 13755099	Applicant(s)/Patent Under Reexamination BROWN, DAVID
	Examiner MARIA EL-ZOOBI	Art Unit 2656

☐ 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
1	15														
2	17														
3	18														
4	19														
5	20														
6	21														
7	22														
8	23														
9	24														
10	25														

NONE (Assistant Examiner) _____ (Date) _____		Total Claims Allowed: 10	
/MARIA EL-ZOOBI/ Primary Examiner. Art Unit 2656 (Primary Examiner) _____ (Date) 7/21/2015		O.G. Print Claim(s) 15	O.G. Print Figure 1



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/755,099	01/31/2013	David Brown	28319-US	1447
23553 7590 MARKS & CLERK P.O. BOX 957 STATION B OTTAWA, ON K1P 5S7 CANADA			EXAMINER EL-ZOOBI, MARIA	
			ART UNIT 2656	PAPER NUMBER
			MAIL DATE 08/19/2015	DELIVERY MODE 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.

Corrected Notice of Allowability	Application No. 13/755,099 Examiner MARIA EL-ZOOBI	Applicant(s) BROWN, DAVID Art Unit 2656 AIA (First Inventor to File) Status No
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-- 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 7/16/2015.
☐ 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 15 and 17-25. 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 _____	5. ☒ Examiner's Amendment/Comment 6. ☐ Examiner's Statement of Reasons for Allowance 7. ☒ Other <u>X-RUSH</u> .
--	--

/MARIA EL-ZOOBI/ Primary Examiner, Art Unit 2656	8/14/2015
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DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Hetal Kushwa on 8/14/2015.

Please amend claim 17 as follow:

17. An endpoint as claimed in claim ~~46~~ 15, wherein the star server constructs the filmstrip on a web page accessible by the end user.

Allowable Subject Matter

2. Claims 15, 17-25 allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARIA EL-ZOBI whose telephone number is (571)270-3434. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 5712727499. 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.

/MARIA EL-ZOOBI/
Primary Examiner, Art Unit 2656



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

23553 7590 07/28/2015
MARKS & CLERK
P.O. BOX 957
STATION B
OTTAWA, ON K1P 5S7
CANADA

EXAMINER

EL-ZOABI, MARIA

ART UNIT

PAPER NUMBER

2656

DATE MAILED: 07/28/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/755,099	01/31/2013	David Brown	28319-US	1447

TITLE OF INVENTION: VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$480	\$0	\$0	\$480	10/28/2015

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
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Alexandria, Virginia 22313-1450
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(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	ART UNIT	CLASS-SUBCLASS
EL-ZOOBI, MARIA	2656	348-014010

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- (1) The names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
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- 3 _____

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(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

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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.

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. _____



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/755,099	01/31/2013	David Brown	28319-US	1447
23553	7590	07/28/2015	EXAMINER	
MARKS & CLERK P.O. BOX 957 STATION B OTTAWA, ON K1P 5S7 CANADA			EL-ZOOBI, MARIA	
			ART UNIT	PAPER NUMBER
			2656	

DATE MAILED: 07/28/2015

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.

Notice of Allowability	Application No. 13/755,099	Applicant(s) BROWN, DAVID	
	Examiner MARIA EL-ZOOBI	Art Unit 2656	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 7/16/2015.
☐ 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 15 and 17-25. 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)	5. ☒ Examiner's Amendment/Comment
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____	6. ☐ Examiner's Statement of Reasons for Allowance
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	7. ☐ Other _____
4. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____	

/MARIA EL-ZOOBI/ Primary Examiner, Art Unit 2656	7/21/2015
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DETAILED ACTION

EXAMINER'S AMENDMENT

1. An extension of time under 37 CFR 1.136(a) is required in order to make an examiner's amendment which places this application in condition for allowance. During a telephone conversation conducted on 7/16/2015, Hetal Kushwaha requested an extension of time for 1 MONTH(S) and authorized the Director to charge Deposit Account No. 131717 the required fee of 200\$ for this extension and authorized the following examiner's amendment. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Hetal Kushwaha on 7/16/2015

Please amend claims 15-16 as follow:

15. An endpoint for a teleconferencing system wherein multiple parties participate in a teleconference from different locations, comprising one or more display screens, and which is configured such that a filmstrip containing simultaneous images or icons representing all of the participants in the teleconference is displayed on said one or

more display screens in a spatial relationship that represents their real-world or virtual-world spatial relationships, wherein the end participants are connected over a mesh network, and a proxy at one of the endpoints receives video feeds for presentation to a user at a non-mesh connected endpoint, wherein the proxy is associated with a server for presenting the video feeds at reduced size to a user located at the non-mesh connected endpoint,

a control function to permit the user to select one of the video feeds for promotion, and wherein in response to a command from the user, the proxy sends the promoted feed as full size video to the non-mesh connected endpoint.

Please cancel claim 16.

Allowable Subject Matter

3. Claims 15, 17-25 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARIA EL-ZOOBI whose telephone number is (571)270-3434. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 5712727499. 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.

/MARIA EL-ZOOBI/
Primary Examiner, Art Unit 2656

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.

Notice of References Cited	Application/Control No. 13/755,099	Applicant(s)/Patent Under Reexamination BROWN, DAVID	
	Examiner MARIA EL-ZOOBI	Art Unit 2656	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2013/0070045	03-2013	Meek, Craig Alexander	348/14.07
*	B	US-2007/0279484	12-2007	Derocher et al.	348/14.09
*	C	US-2006/0259552	11-2006	Mock et al.	709/204
*	D	US-2013/0198785	08-2013	Arling et al.	725/62
*	E	US-2012/0154255	06-2012	Hinckley et al.	345/1.3
*	F	US-2008/0170550	07-2008	Liu et al.	370/338
	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.

Search Notes 	Application/Control No. 13755099	Applicant(s)/Patent Under Reexamination BROWN, DAVID
	Examiner MARIA EL-ZOOBI	Art Unit 2656

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
CPC search with text search	8/13/2014	M.EL
inventor name search	8/13/2014	M.EL
plus search	8/13/2014	M.EL
search is updated	3/20/2015	M.EL

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
709	204	7/21/2015	M.EL

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<i>Index of Claims</i> 	Application/Control No. 13755099	Applicant(s)/Patent Under Reexamination BROWN, DAVID
	Examiner MARIA EL-ZOABI	Art Unit 2656

✓	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	08/13/2014	03/20/2015	06/26/2015	07/21/2015						
	1	✓	✓	-	-						
	2	✓	✓	-	-						
	3	✓	✓	-	-						
	4	✓	✓	-	-						
	5	✓	✓	-	-						
	6	✓	✓	-	-						
	7	✓	✓	-	-						
	8	✓	✓	-	-						
	9	✓	✓	-	-						
	10	✓	✓	-	-						
	11	✓	✓	-	-						
	12	✓	✓	-	-						
	13	✓	✓	-	-						
	14	✓	✓	-	-						
	15	✓	✓	✓	=						
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	17	O	O	O	=						
	18	O	O	O	=						
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	23	=	=	=	=						
	24	=	=	=	=						
	25	=	=	=	=						



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BIB DATA SHEET

CONFIRMATION NO. 1447

SERIAL NUMBER 13/755,099	FILING or 371(c) DATE 01/31/2013 RULE	CLASS 348	GROUP ART UNIT 2656	ATTORNEY DOCKET NO. 28319-US		
APPLICANTS MAGOR COMMUNICATONS CORPORATION, Ottawa, CANADA INVENTORS David Brown, Nepean, CANADA; ** CONTINUING DATA ***** This appln claims benefit of 61/593,381 02/01/2012 ** FOREIGN APPLICATIONS ***** ** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** ** SMALL ENTITY ** 02/21/2013						
Foreign Priority claimed ☐ Yes ☒ No 35 USC 119(a-d) conditions met ☐ Yes ☐ No Verified and Acknowledged <u>/MARIA EL-ZOOBI/</u> Examiner's Signature		☐ Met after Allowance Initials	STATE OR COUNTRY CANADA	SHEETS DRAWINGS 9	TOTAL CLAIMS 25	INDEPENDENT CLAIMS 3
ADDRESS MARKS & CLERK P.O. BOX 957 STATION B OTTAWA, ON K1P 5S7 CANADA						
TITLE VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT						
FILING FEE RECEIVED 823	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			

Issue Classification 	Application/Control No. 13755099	Applicant(s)/Patent Under Reexamination BROWN, DAVID
	Examiner MARIA EL-ZOOBI	Art Unit 2656

CPC					Type	Version
Symbol						
H04N		7		152	F	2013-01-01

CPC Combination Sets					Type	Set	Ranking	Version
Symbol								

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	10	
/MARIA EL-ZOOBI/ Primary Examiner. Art Unit 2656	7/21/2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	15	1

Issue Classification 	Application/Control No. 13755099	Applicant(s)/Patent Under Reexamination BROWN, DAVID
	Examiner MARIA EL-ZOOBI	Art Unit 2656

US ORIGINAL CLASSIFICATION						INTERNATIONAL CLASSIFICATION											
CLASS		SUBCLASS				CLAIMED					NON-CLAIMED						
348		14.01				H	0	4	N	7 / 14 (2006.01.01)							
CROSS REFERENCE(S)																	
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)																
709	204																

NONE		Total Claims Allowed:	
		10	
(Assistant Examiner)	(Date)		
/MARIA EL-ZOOBI/ Primary Examiner. Art Unit 2656	7/21/2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	15	1

Issue Classification 	Application/Control No. 13755099	Applicant(s)/Patent Under Reexamination BROWN, DAVID
	Examiner MARIA EL-ZOOBI	Art Unit 2656

☐ 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
1	15														
2	17														
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7	22														
8	23														
8	24														
10	25														

NONE (Assistant Examiner) _____ (Date) _____		Total Claims Allowed: 10	
/MARIA EL-ZOOBI/ Primary Examiner. Art Unit 2656 (Primary Examiner) _____ (Date) _____		O.G. Print Claim(s) 15	O.G. Print Figure 1



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/755,099	01/31/2013	David Brown	28319-US	1447
23553 7590 MARKS & CLERK P.O. BOX 957 STATION B OTTAWA, ON K1P 5S7 CANADA			EXAMINER EL-ZOOBI, MARIA	
			ART UNIT 2656	PAPER NUMBER
			MAIL DATE 07/01/2015	DELIVERY MODE 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.

Advisory Action Before the Filing of an Appeal Brief	Application No. 13/755,099	Applicant(s) BROWN, DAVID	
	Examiner MARIA EL-ZOOBI	Art Unit 2656	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 16 June 2015 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 _____ 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:
In the final rejection, examiner objected to claims "16-18", claim 15 "re-numbered 14" was rejected over Skramstad (Us 20130027502) in view of Derocher (Us 20070279484) in view of Meek and further in view of Liu (US 20080170550). Therefore, applicant did not re-write the objected claims in independent forms. Rejection is maintained.

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: 19-26.
 Claim(s) objected to: 16-18.
 Claim(s) rejected: 15

6/26/2015	/MARIA EL-ZOOBI/ Primary Examiner, Art Unit 2656
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<i>Index of Claims</i> 	Application/Control No. 13755099	Applicant(s)/Patent Under Reexamination BROWN, DAVID
	Examiner MARIA EL-ZOOBI	Art Unit 2656

✓	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	08/13/2014	03/20/2015	06/26/2015					
	1	✓	✓	-					
	2	✓	✓	-					
	3	✓	✓	-					
	4	✓	✓	-					
	5	✓	✓	-					
	6	✓	✓	-					
	7	✓	✓	-					
	8	✓	✓	-					
	9	✓	✓	-					
	10	✓	✓	-					
	11	✓	✓	-					
	12	✓	✓	-					
	13	✓	✓	-					
	14	✓	✓	-					
	15	✓	✓	✓					
	16	○	○	○					
	17	○	○	○					
	18	○	○	○					
	19	=	=	=					
	20	=	=	=					
	21	=	=	=					
	22	=	=	=					
	23	=	=	=					
	24	=	=	=					
	25	=	=	=					
	26	=	=	=					

PATENT

Agent's Docket No. 28319-US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: David Brown	)
	)
	) Conf no. 1447
	)
	)
	)
Serial No: 13/755,099	) Art Unit: 2656
	)
Filed: January 31, 2013	) Examiner: Maria El-Zoobi

Customer no. 23553

For: **VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL
CONTEXT**

June 16, 2015

Commissioner of Patent and Trademarks
P.O. Box 1450, Alexandria, Virginia 22313-1450

RESPONSE TO OFFICE ACTION MAILED March 24, 2015

Sir:

DEPOSIT ACCOUNT AUTHORIZATION

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees required by this paper and not otherwise paid for may be charged to Deposit Account No. 13-1717.

In response to the Final Office Action dated March 24, 2015, the Applicant responds as follows:

Amendments to the claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-14. Cancelled

15. (Currently amended) An endpoint for a teleconferencing system wherein multiple parties participate in a teleconference from different locations, comprising one or more display screens, and which is configured such that a filmstrip containing simultaneous images or icons representing all of the participants in the teleconference is displayed on said one or more display screens in a spatial relationship that represents their real-world or virtual-world spatial relationships wherein the end participants are connected over a mesh network, and a proxy at one of the endpoints receives video feeds for presentation to a user at a non-mesh connected endpoint

[[An endpoint as claimed in claim 14]], wherein the proxy is associated with a server for presenting the video feeds at reduced size to a user located at the non-mesh connected endpoint.

16. (Previously presented) An endpoint as claimed in claim 15, further comprising a control function to permit the user to select one of the video feeds for promotion, and wherein in response to a command from the user, the proxy sends the promoted feed as full size video to the non-mesh connected endpoint.

17. (Previously presented) An endpoint as claimed in claim 16, wherein the star server constructs the filmstrip on a web page accessible by the end user.

18. (Previously presented) A teleconferencing system comprising:

a plurality of endpoints, at least some of which are connected in a mesh configuration and at least one of which is connected in a non-mesh configuration to a selected one of the mesh-connected endpoints, and which are configured such that a film strip with frames containing reduced-size video feeds from the conference participants is displayed at the mesh endpoints;

a proxy at the selected mesh-connected endpoint for the non-mesh connected endpoint and connected to each of the mesh-connected endpoints to receive video feeds from the mesh-connected endpoints for the non-mesh connected endpoint;

a server associated with the proxy for serving the film strip with frames containing reduced-size video feeds from the mesh-connected conference participants to the non-mesh connected endpoint; and

a control connection permitting a user located at the non-mesh connected endpoint to select a video feed on the film strip for promotion to full size and to initiate transfer of the full size video feed to the non-mesh connected endpoint.

19. (Previously presented) A teleconferencing system as claimed in claim 18, wherein the server is configured to serve the filmstrip to a browser co-located with the non-mesh connected endpoint.

20. (Previously presented) A teleconferencing system as claimed in claim 19, wherein the browser is displayed on a computer co-located with the non-mesh connected endpoint.

21. (Previously presented) A teleconferencing system as claimed in claim 20, wherein the proxy and server are merged into a virtualized environment.

22. (Previously presented) A teleconferencing system as claimed in claim 18, wherein the frames are displayed in a spatial relationship that represents the participants as being located at a virtual table with the conference participants being envisaged as sitting round the virtual table.

23. (Previously presented) A teleconferencing system as claimed in claim 22, wherein the virtual table is a round table.

24. (Previously presented) A teleconferencing system as in claim 22, wherein the spatial relationships are preserved across the system so that the display at each endpoint represents the view at that endpoint of the spatial relationship of the participants at the virtual table.

25. (Previously presented) An endpoint for use as a mesh-connected endpoint in a teleconferencing system comprising a plurality of endpoints, at least some of which are connected in a mesh configuration and at least one of which is connected in a non-mesh configuration to a selected one of the mesh-connected endpoints, wherein a film strip with frames containing reduced-size video feeds from the conference participants is displayed at the mesh endpoints, the mesh-connected endpoint comprising:

- a proxy for connection to each of the mesh-connected endpoints to receive video feeds from the mesh-connected endpoints for the non-mesh connected endpoint;

- a server associated with the proxy for serving the film strip with frames containing reduced-size video feeds from the mesh-connected conference participants to the non-mesh connected endpoint; and

- a proxy controller permitting a user located at the non-mesh connected endpoint to select a video feed on the film strip for promotion to full size and to initiate transfer of the full size video feed to the non-mesh connected endpoint.

Remarks

Rejections under 35 USC § 103.

Claims 1-14 have been cancelled. Claim 15 has been rewritten in independent form.

The Examiner has rejected claims 1 to 10 under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Skramstad (US 20130027502) in view of Derocher (US 20070279484).

The Examiner has rejected claim 11 under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Skramstad (US 20130027502) in view of Derocher (US 20070279484) in view of Meek and further in view of Mock (US 20060259552).

The Examiner has rejected claim 12 under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Skramstad (US 20130027502) in view of Derocher (US 20070279484) in view of Meek and further in view of Elftheriadis (US 20130198795).

The Examiner has rejected claim 13 “previously claim 14” under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Skramstad (US 20130027502) in view of Derocher (US 20070279484) in view of Meek and further in view of Hinckley (US 20120154255).

The Examiner has rejected claim 14 “previously claim 15” under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Skramstad (US 20130027502) in view of Derocher (US 20070279484) in view of Meek and further in view of Liu (US 20080170550).

In response to each of these rejections, claims 1-14 have been cancelled.

USSN: 13/755,099
Art Unit: 2656
Response to Final Office Action Mailed March 24, 2015

In response to the Examiner's comments regarding claims 15, 16 and 17, claim 15 has been rewritten in independent form.

The Examiner is thanked for the indication that claims 18-25 are allowable.

Reconsideration and allowance are therefore earnestly solicited.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'Hetal', is written over a horizontal dotted line.

Registration No. 58,187
Hetal Kushwaha
Agent of Record

MARKS & CLERK
P. O. Box 957, Station B,
Ottawa, Ontario, Canada
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(613) 236-9561

Electronic Acknowledgement Receipt	
EFS ID:	22643852
Application Number:	13755099
International Application Number:	
Confirmation Number:	1447
Title of Invention:	VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT
First Named Inventor/Applicant Name:	David Brown
Customer Number:	23553
Filer:	Richard J. Mitchell/Carolynn Irvin
Filer Authorized By:	Richard J. Mitchell
Attorney Docket Number:	28319-US
Receipt Date:	16-JUN-2015
Filing Date:	31-JAN-2013
Time Stamp:	13:33:32
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Response After Final Action	Response.pdf	27908 a77d8d3a424730e04e098002e63d4185d4f169b9	no	1

Warnings:

Information:

2	Claims	Claims.pdf	140534 1d41255b3107900b1de3f909d33ac97edb88b14	no	3
Warnings:					
Information:					
3	Applicant Arguments/Remarks Made in an Amendment	Remarks.pdf	57082 6e46bab4635ea917916a10b70864e7987020eccc	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			225524		
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					

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 13/755,099		Filing Date 01/31/2013		☐ To be Mailed	
ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO									
APPLICATION AS FILED – PART I									
		(Column 1)		(Column 2)					
FOR		NUMBER FILED		NUMBER EXTRA		RATE (\$)		FEE (\$)	
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))		N/A		N/A		N/A			
☐ SEARCH FEE (37 CFR 1.16(k), (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									
		(Column 1)		(Column 2)		(Column 3)			
AMENDMENT	06/16/2015		CLAIMS REMAINING AFTER AMENDMENT			HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		
	Total (37 CFR 1.16(i))		* 11		Minus	** 25	= 0		
	Independent (37 CFR 1.16(h))		* 3		Minus	***3	= 0		
	☐ Application Size Fee (37 CFR 1.16(s))								
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
						TOTAL ADD'L FEE		0	
		(Column 1)		(Column 2)		(Column 3)			
AMENDMENT			CLAIMS REMAINING AFTER AMENDMENT			HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		
	Total (37 CFR 1.16(i))		*		Minus	**	=		
	Independent (37 CFR 1.16(h))		*		Minus	***	=		
	☐ 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.									

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.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/755,099	01/31/2013	David Brown	28319-US	1447
23553 7590 MARKS & CLERK P.O. BOX 957 STATION B OTTAWA, ON K1P 5S7 CANADA			EXAMINER EL-ZOOBI, MARIA	
			ART UNIT 2656	PAPER NUMBER
			MAIL DATE 03/24/2015	DELIVERY MODE 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.

Office Action Summary	Application No. 13/755,099	Applicant(s) BROWN, DAVID	
	Examiner MARIA EL-ZOOBI	Art Unit 2656	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 1/29/2015.
☐ 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) ____ 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) 1-25 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 1/23/2013 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

Response to Arguments

1. Applicant's arguments with respect to claims 1-25 have been considered but are moot because the arguments do not apply to any of the references being used in the current rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). 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 date of this final action.

Claim Rejections - 35 USC § 103

1. 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 negated by the manner in which the invention was made.

1. Claims 1-10 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Skramstad (Us 20130027502) in view of Derocher (Us 20070279484).

Regarding claim 1, Skramstad discloses, an endpoint for a teleconferencing system wherein multiple parties participate in a teleconference from different locations (Paragraph 20), comprising one or more display screens (Paragraph 38, 58, 66), and which is configured such that a filmstrip containing simultaneous images or icons representing the participants is displayed on said one or more display screens (Fig. 6, see B).

Skramstad discloses that the images representing the participants are spatially mixed and displayed (Paragraph 22)

Skramstad does not explicitly teach the displaying is in a spatial relationship that represents their real-world or virtual-world spatial relationships.

Derocher in the same art of endeavor discloses a video conference with multiple parties in different location wherein displaying the images of the participants is in a spatial relationship that represents their real-world or virtual-world spatial relationships (abstract, Paragraph 24, 15, 33).

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Skramstad with Derocher in order to improve the system and enhance the conferencing experience and provide awareness of the display location of remote studio(s).

Although Skramstad with Derocher does not teach "all participants" as claimed, Skramstad discloses "Paragraph 45", a number of participants is shown in film strips

and Derocher is silent about this limitation; “displaying all the participants will be obvious and desirable in order for the user to identify all people in the conference”.

Meek in the same art of endeavor discloses the above limitation (Paragraph 42).

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Skramstad with Meek so to improve the system by displaying all the participants in order for the user to identify all people in the conference and enhance the conference experience.

Regarding claim 2, Skramstad in view of Derocher in view of Meek discloses, wherein the images or icons are displayed in a spatial relationship that represents the participants as being located at a virtual table with the conference participants being envisaged as sitting round the virtual table (Derocher: Fig. 5-7)

Regarding claim 3, Skramstad in view of Derocher in view of Meek discloses, wherein the virtual table is a round table (Derocher: Fig. 1, Paragraph 17-20).

Regarding claim 4, Skramstad in view of Derocher in view of Meek discloses, wherein the spatial relationships are preserved across the system so that the display at each endpoint represents the view at that endpoint of the spatial relationship of the participants at the virtual table (Derocher: Fig. 5-7, Paragraph 17-20).

Regarding claim 5, Skramstad in view of in view of Meek Derocher discloses, wherein the images or icons are in the form of video (Skramstad: Fig. 6).

Regarding claim 6, Skramstad in view of Derocher in view of Meek discloses, wherein the images or icons are promotable and demotable between a full or

intermediate size and a reduced size in response to an event (Skramstad: Paragraph 22-26, 39, 41-45).

Regarding claim 7, Skramstad in view of Derocher in view of Meek discloses, wherein the event is a user interaction (Skramstad: Paragraph 22-26, 39, 41-45).

Regarding claim 8, Skramstad in view of Derocher in view of Meek discloses, wherein the user interaction is in the form of a mouse click (Skramstad: Paragraph 48).

Regarding claim 9, Skramstad in view of Derocher in view of Meek discloses, which is configured such that when a reduced size image is promoted to full size, the video continues to run in the reduced size image, which retains its spatial relationship with the other images representing the real-world or virtual world spatial relationships of the participants (Skramstad: Fig. 6).

Regarding claim 10, Skramstad in view of Derocher in view of Meek discloses, which is further configured to display collaboration images or icons representing presentations from conference participants on said one or more display screens at a conference location in a spatial relationship that represents their real-world or virtual-world spatial relationships (Skramstad: Paragraph 23, 67).

2. Claim 11 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Skramstad (Us 20130027502) in view of Derocher (Us 20070279484) in view of Meek and further in view of Mock (US 20060259552).

Regarding claim 11, Skramstad in view of Derocher in view of Meek discloses, presentation (see claim 10).

Skramstad in view of Derocher does not disclose wherein collaboration images or icons are positioned close to the image or icon representing the participant making the presentation.

Mock discloses video conference between multiple parties wherein collaboration images or icons are positioned close to the image or icon representing the participant making the presentation (Fig. 6A).

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Skramstad with Mock in order to improve the system and enhance the conferencing experience and allow the participants to easily recognize the presenter.

3. Claim 12 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Skramstad (Us 20130027502) in view of Derocher (Us 20070279484) in view of Meek and further in view of Elftheriadis (US 20130198795).

Regarding claim 12 “previously 13”, Skramstad in view of Derocher in view of Meek discloses, the claimed endpoint.

Skramstad in view of Derocher does not teach which is configured such that a newly added item is immediately promoted.

Elftheriadis teach in a video communication a newly added item is immediately promoted (Paragraph 140, abstract).

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Skramstad with Mock in order to improve the system and

enhance the conferencing experience and allow the participants to easily recognize the newly added item.

Claim 13 “previously 14” is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Skramstad (Us 20130027502) in view of Derocher (Us 20070279484) in view of Meek and further in view of Hinckley (Us 20120154255).

Regarding claim 13 “previously 14”, Skramstad in view of in view of Meek Derocher discloses, comprising at least two display screens (Skramstad: (Paragraph 38, 58, 66)).

Skramstad in view of Derocher does not teach wherein the images or icons are draggable between the different display screens, and wherein an image or icon dragged to another display screen “pushes” images or icons ahead of it so as to preserve the order of the images or icons and thus their spatial relationship.

Hinckley discloses two displays for endpoint wherein an image can be dragged from one into another (Paragraph 6, 7, 20, 44, 69).

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Skramstad with Hinckley in order to improve the system and enhance the conferencing experience

Claim 14 “previously 15” is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Skramstad (Us 20130027502) in view of Derocher (Us 20070279484) in view of Meek and further in view of Liu (US 20080170550).

Regarding claim 14 “previously 15”, Skramstad in view of Derocher in view of Meek discloses, the claimed endpoint.

Skramstad in view of Derocher does not disclose wherein the end participants are connected over a mesh network, and a proxy at one of the endpoints receives video feeds for presentation to a user at a non-mesh connected endpoint.

Liu discloses a mesh- based connected node and wherein the non-mesh node receive the data through a proxy (Paragraph 29-30, 46).

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Skramstad with Liu in order to improve the system by providing fully connected wired networks have the advantages of security and reliability: problems in a cable affect only the two nodes attached to it. However, in such networks, the number of cables, and therefore the cost, goes up rapidly as the number of nodes increases.

Allowable Subject Matter

3. Claims 15-17; previously 16-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
4. Claims 18-25 “previously 19-26” are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARIA EL-ZOOBI whose telephone number is (571)270-3434. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 5712727499. 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.

/MARIA EL-ZOOBI/
Primary Examiner, Art Unit 2656

Notice of References Cited	Application/Control No. 13/755,099	Applicant(s)/Patent Under Reexamination BROWN, DAVID	
	Examiner MARIA EL-ZOOBI	Art Unit 2656	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2013/0070045	03-2013	Meek, Craig Alexander	348/14.07
	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	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. 13755099	Applicant(s)/Patent Under Reexamination BROWN, DAVID
	Examiner MARIA EL-ZOOBI	Art Unit 2656

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
CPC search with text search	8/13/2014	M.EL
inventor name search	8/13/2014	M.EL
plus search	8/13/2014	M.EL
search is updated	3/20/2015	M.EL

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

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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	1	13/755099	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/08/11 16:39
S2	509	(video near1 conferenc\$3) and virtual and (display\$3 with spatial)	US-PGPUB; USPAT	OR	ON	2014/08/12 07:30
S3	184	S2 AND ((G06F3/017 OR G06F3/011 OR G06F17/30041 OR G06F17/30056 OR H04N7/15 OR H04N7/157 OR H04N7/147 OR H04N7/152 OR H04N9/3194).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/12 07:31
S4	92	S2 AND ((H04N7/15 OR H04N7/157 OR H04N7/147 OR H04N7/152 OR H04N9/3194).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/12 07:31
S5	95	(video near1 conferenc\$3) and virtual and (display\$3 with spatial)and real and mimic	US-PGPUB; USPAT	OR	ON	2014/08/12 07:31
S6	9	S5 AND ((H04N7/15 OR H04N21/4305 OR H04N5/2254 OR H04N5/2259 OR H04N5/23238 OR H04N9/3161 OR H04N9/3173 OR H04N13/0468 OR H04N7/142 OR H04N9/3185 OR H04N9/3194).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/12 07:32
S7	5	"5,999208".pn. "6,624841".pn. "7,111045".pn. "20110103624" "5,335011".pn.	US-PGPUB; USPAT	OR	ON	2014/08/12 10:54
S8	5	("20080267282" "20110187813" "20070285506" "20110047487" "20110205332").pn.	US-PGPUB; USPAT	OR	ON	2014/08/12 10:55
S9	160	(video near1 conferenc\$3) and virtual and (display\$3 with spatial)and mesh	US-PGPUB; USPAT	OR	ON	2014/08/12 10:58
S10	14	S9 AND ((H04N7/147 OR H04N7/15 OR H04N7/157 OR H04N21/4312 OR H04N21/4314 OR H04N13/0468 OR H04N19/00575 OR H04N21/233 OR H04N21/234363 OR H04N21/234381 OR H04N21/42203 OR H04N21/4223 OR H04N21/4788 OR H04N7/142 OR H04N7/152 OR H04M3/567 OR H04M2203/5072).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/12 10:58
S12	0	david.in. and brown.in. and conferenc\$3.clm. and mesh .clm. and virtual.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/08/12 11:01

S13	70	david.in. and brown.in. and virtual.clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/08/12 11:02
S14	2	david.in. and brown.in. and virtual.clm. and spatial.clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/08/12 11:02
S15	11	david.in. and brown.in. and virtual.clm. and conferenc\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/08/12 11:03
S16	2	david.in. and brown.in. and virtual.clm. and conferenc\$3 and proxy	US-PGPUB; USPAT	OR	ON	2014/08/12 12:09
S17	2	S16 AND ((H04N21/4782 OR H04N21/4828 OR H04N7/152).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/12 12:10
S18	77	(video near1 conferenc\$3) and virtual and (display\$3 with spatial)and proxy	US-PGPUB; USPAT	OR	ON	2014/08/12 12:14
S19	1	13/755099 and proxy and server	US-PGPUB; USPAT	OR	ON	2014/08/13 09:46
S20	76	(video near1 conferenc\$3) and virtual and (display\$3 with spatial)and proxy and server	US-PGPUB; USPAT	OR	ON	2014/08/13 09:49
S21	24	S20 AND ((H04N21/44222 OR H04N2005/91328 OR H04N2005/91364 OR H04N21/4131 OR H04N21/42201 OR H04N21/4532 OR H04N21/47 OR H04N5/782 OR H04N5/913 OR H04N19/0043 OR H04N19/00781 OR H04N19/00933 OR H04N21/2662 OR H04N21/4318 OR H04N21/44008 OR H04N21/4621 OR H04N21/4668 OR H04N21/475 OR H04N7/163 OR H04N7/152 OR H04N19/00127 OR H04N19/00242 OR H04N19/00266 OR H04N19/00278 OR H04N19/00436 OR H04N19/00448 OR H04N19/00454 OR H04N19/00715 OR H04N19/00721 OR H04N19/00727 OR H04N19/00751 OR H04N21/234327 OR H04N21/4223 OR H04N21/4316 OR H04N21/4438 OR H04N21/4788 OR H04N21/631 OR H04N21/6375 OR H04N21/6379 OR H04N21/6405 OR H04N21/6583 OR H04N7/18).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 09:49
S22	14	"8,736660".pn. "8,542266".pn. "8,446454".pn. "7,889226".pn. "7,884843".pn. "8,139100".pn. "7,593986".pn. "20110187813" "8,427520".pn. "5,740161".pn. "6,020915".pn. "7,113200".pn. "20070206089"	US-PGPUB; USPAT	OR	ON	2014/08/13 10:02

S23	12	S22 AND ((H04N7/152 OR H04N7/15 OR H04N7/147 OR H04N13/0484 OR H04N2213/006 OR H04N5/272 OR H04N7/142 OR H04M3/567 OR H04M2201/50 OR H04M3/563 OR H04M3/565 OR H04M2201/41 OR H04M3/42221).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 10:02
S25	3	(video near1 conferenc\$3) and virtual and (display\$3 with spatial) and filmstrip	US-PGPUB; USPAT	OR	ON	2014/08/13 10:07
S26	3	S25 AND ((H04N21/4305 OR H04N5/2254 OR H04N5/2259 OR H04N5/23238 OR H04N7/152).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 10:07
S27	3	(video near1 conferenc\$3) and virtual and (display\$3 with spatial)and ((image video) with film\$strip\$1)	US-PGPUB; USPAT	OR	ON	2014/08/13 10:15
S28	3	S27 AND ((H04N21/4305 OR H04N5/2254 OR H04N5/2259 OR H04N5/23238 OR H04N7/152).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 10:15
S29	3	(video near1 conferenc\$3) and (display\$3 with spatial)and ((image video) with film\$strip\$1)	US-PGPUB; USPAT	OR	ON	2014/08/13 10:15
S30	3	S29 AND ((H04N21/4305 OR H04N5/2254 OR H04N5/2259 OR H04N5/23238 OR H04N7/152).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 10:16
S31	33	(video near1 conferenc\$3) and ((image video) with film\$strip\$1)	US-PGPUB; USPAT	OR	ON	2014/08/13 10:16
S32	9	S31 AND ((H04N7/147 OR H04N7/15 OR H04N21/4307 OR H04N21/4788 OR H04N21/2368 OR H04N21/4135 OR H04N21/42203 OR H04N21/4223 OR H04N21/4341 OR H04N21/4621 OR H04N21/485 OR H04N21/6118 OR H04N21/6168 OR H04N21/632 OR H04N21/643 OR H04N21/64322 OR H04N21/2381 OR H04N21/4305 OR H04N21/4316 OR H04N21/4325 OR H04N21/4334 OR H04N21/4363 OR H04N21/4381 OR H04N5/2254 OR H04N5/2259 OR H04N5/23238 OR H04N21/4143 OR H04N21/4312 OR H04N21/4314 OR H04N21/440227 OR H04N21/44222 OR H04N21/8133 OR H04N21/8173 OR H04N21/8405 OR H04N7/152).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 10:16
S33	1	13/755099 and filmstrip	US-PGPUB; USPAT	OR	ON	2014/08/13 10:17
S34	19	"7,185054".pn. "7,111045".pn. "5,335011".pn. "5,999208".pn. "6,624841".pn. "20110103624".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/08/13 10:23
S35	783	(video near1 conferenc\$3) and (display\$3 with spatial)	US-PGPUB; USPAT	OR	ON	2014/08/13 10:50
S36	318	S35 AND ((H04N7/15 OR H04N7/147 OR H04N7/157 OR H04N19/00533 OR H04N19/00757 OR H04N7/152 OR H04N13/0468 OR H04N9/3194 OR	US-PGPUB; USPAT	OR	ON	2014/08/13 10:50

		H04N13/0402 OR H04N13/0459 OR H04N19/00436 OR H04N19/00569 OR H04N19/00854 OR H04N19/00884 OR H04N19/00903 OR H04N19/00909 OR H04N2005/91328 OR H04N2005/91364 OR H04N21/4131 OR H04N21/42201 OR H04N21/44218 OR H04N21/44222 OR H04N21/4532 OR H04N21/47 OR H04N21/4788 OR H04N5/782 OR H04N5/913 OR H04N7/142 OR H04N9/3129 OR H04N9/3155 OR H04N9/3164 OR H04N9/3173 OR H04N9/3185 OR H04N13/0007 OR H04N13/0022 OR H04N13/0059 OR H04N13/04 OR H04N13/0413 OR H04N13/0422 OR H04N13/0425 OR H04N13/0431 OR H04N13/0434 OR H04N13/0447 OR H04N17/02 OR H04N19/00 OR H04N19/00066 OR H04N19/00096 OR H04N19/00121 OR H04N19/00127 OR H04N19/00206 OR H04N19/0023 OR H04N19/00303 OR H04N19/004 OR H04N19/00424 OR H04N19/0043 OR H04N19/00442 OR H04N19/00563 OR H04N19/00575 OR H04N19/00587 OR H04N19/0069 OR H04N19/00733 OR H04N19/00763 OR H04N19/00775 OR H04N19/00781 OR H04N19/00806 OR H04N19/00818 OR H04N19/00824 OR H04N19/00921 OR H04N19/00927 OR H04N19/00963 OR H04N1/6033 OR H04N1/6052 OR H04N21/2343 OR H04N21/234327 OR H04N21/2365 OR H04N21/2668 OR H04N21/278 OR H04N21/42203 OR H04N21/4223 OR H04N21/4307 OR H04N21/44008 OR H04N21/6587 OR H04N21/816 OR H04N5/225 OR H04N5/23216 OR H04N5/4403 OR H04N5/44591 OR H04N7/144 OR H04N7/181 OR H04N7/183 OR H04N9/3147 OR H04N9/3182 OR H04N9/68 OR H04N9/73 OR H04N9/74).CPC.)				
S37	130	(video near1 conferenc\$3) and (display\$3 with spatial) and endpoint	US-PGPUB; USPAT	OR	ON	2014/08/13 10:51
S38	83	S37 AND ((H04N7/152 OR H04N19/0043 OR H04N19/00781 OR H04N21/44222 OR H04N19/00933 OR H04N2005/91328 OR H04N2005/91364 OR H04N21/4131 OR H04N21/42201 OR H04N21/4532 OR H04N21/47 OR H04N5/782 OR H04N5/913 OR H04N9/3194 OR H04N19/00436 OR H04N19/00448 OR H04N19/00424 OR H04N19/00472 OR H04N19/00533 OR H04N19/00763 OR H04N19/00854 OR H04N21/234327 OR H04N21/2662 OR H04N21/4621 OR H04N7/14 OR H04N9/3182 OR H04N17/02 OR H04N19/00418 OR H04N19/00545 OR H04N19/00939 OR H04N1/6033 OR H04N1/6052 OR H04N7/15 OR H04N9/3147 OR H04N9/68 OR H04N9/73 OR H04N19/00127 OR	US-PGPUB; USPAT	OR	ON	2014/08/13 10:51

		H04N19/00454 OR H04N19/00563 OR H04N19/00587 OR H04N19/00715 OR H04N19/00721 OR H04N19/00751 OR H04N19/00757 OR H04N7/142 OR H04N7/147 OR H04N7/181 OR H04N9/3185 OR H04N9/3197 OR H04N19/00242 OR H04N19/00266 OR H04N19/00278 OR H04N19/00727 OR H04N21/4223 OR H04N21/4305 OR H04N21/4316 OR H04N21/4438 OR H04N21/4788 OR H04N21/631 OR H04N21/6375 OR H04N21/6379 OR H04N21/6405 OR H04N21/6583 OR H04N5/2254 OR H04N5/2259 OR H04N5/23238 OR H04N13/0048 OR H04N13/0468 OR H04N19/00024 OR H04N19/0003 OR H04N19/00169 OR H04N19/0023 OR H04N19/00236 OR H04N19/00321 OR H04N19/00442 OR H04N19/00575 OR H04N19/00769 OR H04N19/00884 OR H04N1/00204 OR H04N1/00236 OR H04N1/00244 OR H04N1/00307 OR H04N1/00355 OR H04N1/00363 OR H04N1/00374 OR H04N1/00968 OR H04N1/00973 OR H04N21/234363 OR H04N21/234381 OR H04N21/431 OR H04N21/4314 OR H04N21/4318 OR H04N21/4383 OR H04N21/4384 OR H04N21/44008 OR H04N21/440227 OR H04N21/4668 OR H04N21/475 OR H04N21/64322 OR H04N21/8451 OR H04N21/8549 OR H04N2201/3249 OR H04N2201/3269 OR H04N2201/3273 OR H04N2201/3278 OR H04N2201/328 OR H04N5/765 OR H04N5/772 OR H04N5/775 OR H04N5/783 OR H04N5/85 OR H04N7/157 OR H04N7/163 OR H04N9/8042 OR H04N9/8205).CPC.)				
S39	139	(video near1 conferenc\$3) and (display\$3 with spatial with (image video)) and GUI	US-PGPUB; USPAT	OR	ON	2014/08/13 11:03
S40	56	S39 AND ((H04N19/00127 OR H04N21/234363 OR H04N21/234381 OR H04N21/44222 OR H04N19/00781 OR H04N2005/91328 OR H04N2005/91364 OR H04N21/233 OR H04N21/4131 OR H04N21/42201 OR H04N21/4532 OR H04N21/47 OR H04N5/782 OR H04N5/913 OR H04N19/0009 OR H04N19/00133 OR H04N19/00751 OR H04N21/23412 OR H04N21/234336 OR H04N21/234354 OR H04N21/23655 OR H04N21/2402 OR H04N21/2407 OR H04N21/241 OR H04N21/2543 OR H04N21/262 OR H04N21/2668 OR H04N21/274 OR H04N21/478 OR H04N21/488 OR H04N21/6168 OR H04N21/6187 OR H04N21/6405 OR H04N21/6408 OR H04N21/6547 OR H04N21/6587 OR H04N21/812 OR H04N21/8173 OR H04N21/8453 OR H04N21/8543 OR H04N21/8586 OR H04N7/147 OR H04N7/165 OR H04N9/3194 OR H04N7/15 OR	US-PGPUB; USPAT	OR	ON	2014/08/13 11:03

		H04N7/142 OR H04N9/3129 OR H04N9/3155 OR H04N9/3164 OR H04N9/3173 OR H04N9/3185 OR H04N17/02 OR H04N19/00139 OR H04N19/00309 OR H04N19/00757 OR H04N19/00957 OR H04N1/6033 OR H04N1/6052 OR H04N2007/145 OR H04N21/4314 OR H04N7/148 OR H04N7/152 OR H04N9/3182 OR H04N9/68 OR H04N9/73 OR H04N21/4312 OR H04N13/0409 OR H04N13/0454 OR H04N13/0468 OR H04N13/0497 OR H04N19/0023 OR H04N19/0043 OR H04N19/00436 OR H04N19/00472 OR H04N1/00307 OR H04N1/0044 OR H04N21/234327 OR H04N21/42203 OR H04N21/4223 OR H04N21/431 OR H04N21/4318 OR H04N21/4383 OR H04N21/4384 OR H04N21/44008 OR H04N21/440227 OR H04N21/4621 OR H04N21/4668 OR H04N21/475 OR H04N21/4788 OR H04N21/64322 OR H04N21/8549 OR H04N5/23216 OR H04N5/765 OR H04N5/772 OR H04N5/775 OR H04N5/783 OR H04N5/85 OR H04N7/157 OR H04N7/163 OR H04N7/18 OR H04N7/183 OR H04N7/26313 OR H04N7/26882 OR H04N9/8042 OR H04N9/8205).CPC.)				
S41	27	S40 not S38	US-PGPUB; USPAT	OR	ON	2014/08/13 11:04
S42	26762	(endpoint computer device) with (two near2 (display screen))	US-PGPUB; USPAT	OR	ON	2014/08/13 11:48
S43	740	(endpoint computer device) with (two near2 (display screen))and (video near1 conferenc\$3)	US-PGPUB; USPAT	OR	ON	2014/08/13 11:49
S44	257	S43 AND ((H04N21/44222 OR H04N21/4532 OR H04N21/47 OR H04N21/482 OR H04N21/6125 OR H04N21/8173 OR H04N21/488 OR H04N21/8126 OR H04N5/4403 OR H04N17/04 OR H04N21/25808 OR H04N21/26291 OR H04N21/42204 OR H04N21/4307 OR H04N21/4316 OR H04N21/432 OR H04N21/433 OR H04N21/435 OR H04N21/437 OR H04N21/4396 OR H04N21/442 OR H04N21/44204 OR H04N21/44213 OR H04N21/4622 OR H04N21/472 OR H04N21/47202 OR H04N21/4755 OR H04N21/478 OR H04N21/4788 OR H04N21/4821 OR H04N21/4823 OR H04N21/4828 OR H04N21/485 OR H04N21/4858 OR H04N21/4882 OR H04N21/6175 OR H04N21/8133 OR H04N21/8166 OR H04N21/8358 OR H04N21/84 OR H04N5/445 OR H04N5/50 OR H04N7/15 OR H04N7/147 OR H04N13/0468 OR H04N2005/91328 OR H04N2005/91364 OR H04N21/4131 OR H04N21/42201 OR H04N21/43635 OR H04N5/23238 OR H04N5/782 OR	US-PGPUB; USPAT	OR	ON	2014/08/13 11:49

		H04N5/913 OR H04N13/0018 OR H04N13/0033 OR H04N13/0059 OR H04N13/02 OR H04N13/0242 OR H04N13/0253 OR H04N13/0278 OR H04N1/58 OR H04N1/60 OR H04N2005/4433 OR H04N2005/44565 OR H04N21/23406 OR H04N21/23439 OR H04N21/4122 OR H04N21/42219 OR H04N21/43615 OR H04N21/44004 OR H04N21/4402 OR H04N21/45 OR H04N21/4516 OR H04N21/45455 OR H04N21/4782 OR H04N21/65 OR H04N21/8153 OR H04N2213/003 OR H04N5/232 OR H04N5/23216 OR H04N5/23219 OR H04N5/23245 OR H04N5/23293 OR H04N5/2628 OR H04N5/268 OR H04N5/44543 OR H04N7/14 OR H04N7/141 OR H04N7/142 OR H04N7/144 OR H04N7/152 OR H04N7/155 OR H04N7/157 OR H04N7/183 OR H04N7/26 OR H04N9/75 OR H04L51/32 OR H04L12/1827 OR H04L43/0852 OR H04L63/08 OR H04L65/1069 OR H04L65/403 OR H04L67/025 OR H04L67/38).CPC.)				
S45	67	(endpoint computer device) with (two near2 (display screen))same (video near1 conferenc\$3)	US-PGPUB; USPAT	OR	ON	2014/08/13 11:49
S46	45	S45 AND ((H04N7/15 OR H04N7/147 OR H04N7/141 OR H04N7/144 OR H04N7/142 OR H04N2007/145 OR H04N7/152 OR H04N13/0003 OR H04N13/0037 OR H04N13/0278 OR H04N5/2251 OR H04N7/157 OR H04N1/00283 OR H04N1/00299 OR H04N1/195 OR H04N1/19594 OR H04N21/242 OR H04N21/42203 OR H04N21/4223 OR H04N21/4307 OR H04N21/4312 OR H04N21/4788 OR H04N21/8547 OR H04N2201/0436 OR H04N5/04 OR H04N7/155 OR H04N7/26 OR H04N9/75 OR H04M3/562).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 11:50
S47	4	"20130027502" "20130198629" "20070279484"	US-PGPUB; USPAT	OR	ON	2014/08/13 12:12
S48	4	"20130027502" "20130198629" "20070279484" and (presentation)	US-PGPUB; USPAT	OR	ON	2014/08/13 13:22
S49	4	("20130027502" "20130198629" "20070279484") and (presentation point lecture)	US-PGPUB; USPAT	OR	ON	2014/08/13 13:26
S50	1	mesh with proxy with (non near1 mesh) and conferenc\$3	US-PGPUB; USPAT	OR	ON	2014/08/13 13:30
S51	1	mesh and proxy with (non near1 mesh) and conferenc\$3	US-PGPUB; USPAT	OR	ON	2014/08/13 13:30
S52	20	mesh and proxy and (non near1 mesh) and conferenc\$3	US-PGPUB; USPAT	OR	ON	2014/08/13 13:31
S53	7	(enlarg\$3 (maximize near1 size)) with (new newly) with added with (user participants document) and conferenc\$3	US-PGPUB; USPAT	OR	ON	2014/08/13 14:23
S54	7	S53 AND ((G06F17/30247 OR G06K9/00288 OR G06K9/00295 OR	US-PGPUB; USPAT	OR	ON	2014/08/13 14:23

		G06K9/00208 OR G06K9/622 OR G06K9/00221 OR G06K9/00228 OR G06K9/00677).CPC.)				
S55	10	(enlarg\$3 (maximize near1 size)) with (new newly) with added with (user participant document) and conferenc\$3	US-PGPUB; USPAT	OR	ON	2014/08/13 14:24
S56	3	S55 AND ((H04N21/234327 OR H04N21/2662 OR H04N21/4314 OR H04N21/4622 OR H04N21/4858 OR H04N21/654 OR H04N21/6587 OR H04N7/152).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 14:24
S57	4	(images icons video)with draggable with (different two) with (display screens)	US-PGPUB; USPAT	OR	ON	2014/08/13 15:03
S58	4	S57 AND ((G06F3/04817 OR G06F3/0482 OR G06F3/0486 OR G06F1/1694 OR G06F3/017 OR G06F3/0487 OR G06T11/206 OR H04N7/152 OR H04W4/02).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 15:05
S59	254	(endpoint computer device) with (two near2 (display screen))and (video near1 conferenc\$3) and (drag drag\$4)	US-PGPUB; USPAT	OR	ON	2014/08/13 15:08
S60	134	S59 AND ((G06F3/017 OR G06F3/011 OR G06F3/013 OR G06F3/005 OR G06F1/163 OR G06F17/00 OR G06F2203/0331 OR H04N7/15 OR H04N7/147 OR H04N2007/145 OR H04N7/142 OR H04N13/0468 OR H04N21/4307 OR H04N21/431 OR H04N21/4788 OR H04N21/632 OR H04N5/23238 OR H04N5/268 OR H04N7/141 OR H04N7/152 OR H04N7/183).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 15:09
S61	3	(endpoint computer device) with (two near2 (display screen))with (drag\$3 push\$3) and (video near1 conferenc\$3)	US-PGPUB; USPAT	OR	ON	2014/08/13 15:09
S62	3	S61 AND ((F16M13/02 OR H04N5/64 OR H04N7/152 OR Y10S345/905).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 15:10
S63	1	13/755099 and drag	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/08/13 15:11
S64	129	mesh and proxy and (non near2 mesh)	US-PGPUB; USPAT	OR	ON	2014/08/13 15:43
S65	73	S64 AND ((H04W84/18 OR H04W40/02 OR H04W40/28 OR H04W40/24 OR H04W48/08 OR H04W76/02 OR H04W88/08 OR H04W12/06 OR H04W40/12 OR H04W40/246 OR H04W40/34 OR H04W40/36 OR H04W8/005 OR H04W8/26 OR H04W12/02 OR H04W36/08 OR H04W40/10 OR H04W40/26 OR H04W4/003 OR H04W4/06 OR H04W84/22 OR H04W88/06 OR H04W36/0005 OR H04W36/18 OR H04W40/005 OR H04W40/248 OR H04W40/32 OR H04W48/17 OR H04W48/20 OR H04W4/12 OR	US-PGPUB; USPAT	OR	ON	2014/08/13 15:44

		H04W52/0219 OR H04W68/00 OR H04W68/08 OR H04W72/1236 OR H04W74/0808 OR H04W80/04 OR H04W84/12 OR H04W88/10 OR H04W8/085 OR H04W8/087 OR G06Q10/00 OR G05D17/00 OR G07F15/008 OR H04N21/4126 OR H04N21/43615 OR H04N21/4333 OR H04N21/439 OR H04N21/6581 OR H04N21/8113 OR H04N7/152).CPC.)				
S66	92	mesh and proxy and (non near2 mesh)and server	US-PGPUB; USPAT	OR	ON	2014/08/13 15:44
S67	69	S66 AND ((H04W84/18 OR H04W76/02 OR H04W40/02 OR H04W12/06 OR H04W48/08 OR H04W88/08 OR H04W40/24 OR H04W8/005 OR H04W8/26 OR H04W40/246 OR H04W40/28 OR H04W40/36 OR H04W40/12 OR H04W4/06 OR H04W12/02 OR H04W36/18 OR H04W40/26 OR H04W4/003 OR H04W4/12 OR H04W72/1236 OR H04W74/0808 OR H04W36/0005 OR H04W40/005 OR H04W40/248 OR H04W40/32 OR H04W48/17 OR H04W48/20 OR H04W52/0219 OR H04W68/00 OR H04W68/08 OR H04W80/04 OR H04W84/12 OR H04W84/22 OR H04W88/10 OR H04W8/085 OR H04W8/087 OR G06Q10/00 OR G06Q20/102 OR G06Q20/145 OR G06Q30/0283 OR G06Q30/04 OR G06Q50/06 OR G06Q30/0241 OR G06Q10/10 OR G06Q30/0277 OR G06Q50/18 OR G06Q30/0251 OR G06Q10/02 OR G06Q30/0267 OR G06Q30/0603 OR G06Q30/08 OR G06Q40/04 OR G06Q40/06 OR G06Q40/08 OR G05D17/00 OR G05D3/12 OR H04M15/08 OR H04M15/8083 OR H04M2215/0184 OR H04M2215/0192 OR H04M2215/62 OR H04M15/00 OR H04M3/4878 OR H04N21/4126 OR H04N21/43615 OR H04N21/4333 OR H04N21/439 OR H04N21/6581 OR H04N21/8113 OR H04N7/152).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 15:44
S68	16	"20120110052" "20130250786" "20130070045" "20130047123" "20070279484"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/19 14:29
S69	3	"20070279484"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/03/19 14:30
S70	8	"20130027502" "20070279484"	US-PGPUB;	OR	ON	2015/03/19

EAST Search History

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB		14:32
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<i>Index of Claims</i> 	Application/Control No. 13755099	Applicant(s)/Patent Under Reexamination BROWN, DAVID
	Examiner MARIA EL-ZOOBI	Art Unit 2656

✓	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	08/13/2014	03/20/2015												
	1	✓	✓												
	2	✓	✓												
	3	✓	✓												
	4	✓	✓												
	5	✓	✓												
	6	✓	✓												
	7	✓	✓												
	8	✓	✓												
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	16	O	O												
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	21	=	=												
	22	=	=												
	23	=	=												
	24	=	=												
	25	=	=												
	26	=	=												

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named
Inventor : David Brown Confirmation No.: 1447

Appln No. : 13/755,099 Group Art Unit: 2656

Filed : January 31, 2013 Examiner: Maria El-Zoobi

For : VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL
PHYSICAL CONTEXT

AMENDMENT

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

Madam:

In response to the Non-Final Action dated August 29, 2014, please amend the application
as follows:

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An endpoint for a teleconferencing system wherein multiple parties participate in a teleconference from different locations, comprising one or more display screens, and which is configured such that a filmstrip containing simultaneous images or icons representing all of the participants in the teleconference is displayed on said one or more display screens in a spatial relationship that represents their real-world or virtual-world spatial relationships.

2. (Original) An endpoint as claimed in claim 1, wherein the images or icons are displayed in a spatial relationship that represents the participants as being located at a virtual table with the conference participants being envisaged as sitting round the virtual table.

3. (Currently Amended) An endpoint as claimed in claim ~~2~~¹, wherein the virtual table is a round table.

4. (Original) An endpoint as claimed in claim 2, wherein the spatial relationships are preserved across the system so that the display at each endpoint represents the view at that endpoint of the spatial relationship of the participants at the virtual table.

5. (Original) An endpoint as claimed in claim 1, wherein the images or icons are in the form of video.

6. (Original) An endpoint as claimed in claim 1, wherein the images or icons are promotable and demotable between a full or intermediate size and a reduced size in response to an event.

7. (Original) An endpoint as claimed in claim 6, wherein the event is a user interaction.

8. (Currently Amended) An endpoint~~A teleconferencing system~~ as claimed in claim 7, wherein the user interaction is in the form of a mouse click.

9. (Currently Amended) An endpoint as claimed in claim 5~~6~~, which is configured such that when a reduced size image is promoted to full size, the video continues to run in the reduced size image, which retains its spatial relationship with the other images representing the real-world or virtual world spatial relationships of the participants.

10. (Original) An endpoint as claimed in claim 1, which is further configured to display collaboration images or icons representing presentations from conference participants on said one or more display screens at a conference location in a spatial relationship that represents their real-world or virtual-world spatial relationships.

11. (Original) An endpoint as claimed in claim 11, wherein collaboration images or icons are positioned close to the image or icon representing the participant making the presentation.

12~~13~~. (Currently Amended) An endpoint as claimed in claim 6, which is configured such that a newly added item is immediately promoted.

13~~14~~. (Currently Amended) An endpoint as claimed in claim 1, wherein the one or more display screens comprises~~comprising~~ at least two display screens, wherein the images or icons are draggable between the different display screens, and wherein an image or icon dragged to another display screen “pushes” images or icons ahead of it so as to preserve the order of the images or icons and thus their spatial relationship.

14~~15~~. (Currently Amended) An endpoint as claimed in claim 1, wherein the end participants are connected over a mesh network, and a proxy at one of the endpoints receives video feeds for presentation to a user at a non-mesh connected endpoint.

1516. (Currently Amended) An endpoint as claimed in claim 1415, wherein the proxy is associated with a server for presenting the video feeds at reduced size to a user located at the non-mesh connected endpoint.

1617. (Currently Amended) An endpoint as claimed in claim 1516, further comprising a control function to permit the user to select one of the video feeds for promotion, and wherein in response to a command from the user, the proxy sends the promoted feed as full size video to the non-mesh connected endpoint.

1718. (Currently Amended) An endpoint as claimed in claim 1617, wherein the star server constructs the filmstrip on a web page accessible by the end user.

1819. (Currently Amended) A teleconferencing system comprising:

a plurality of endpoints, at least some of which are connected in a mesh configuration and at least one of which is connected in a non-mesh configuration to a selected one of the mesh-connected endpoints, and which are configured such that a film strip with frames containing reduced-size video feeds from the conference participants-is is displayed at the mesh endpoints;

a proxy at the selected mesh-connected endpoint for the non-mesh connected endpoint and connected to each of the mesh-connected endpoints to receive video feeds from the mesh-connected endpoints for the non-mesh connected endpoint;

a server associated with the proxy for serving the film strip with frames containing reduced-size video feeds from the mesh-connected conference participants to the non-mesh connected endpoint; and

a control connection permitting a user located at the non-mesh connected endpoint to select a video feed on the film strip for promotion to full size and to initiate transfer of the full size video feed to the non-mesh connected endpoint.

1920. (Currently Amended) A ~~teleconference~~teleconferencing system as claimed in claim 1819, wherein the server is configured to serve the filmstrip to a browser co-located with the non-mesh connected endpoint.

2021. (Currently Amended) A ~~teleconferencing~~teleconference system as claimed in claim 1920, wherein the browser is displayed on a computer co-located with the non-mesh connected endpoint.

2122. (Currently Amended) A ~~teleconferencing~~teleconference system as claimed in claim 2021, wherein the proxy and server are merged into a virtualized environment.

2223. (Currently Amended) A ~~teleconferencing~~teleconference system as claimed in claim 1819, wherein the frames are displayed in a spatial relationship that represents the participants as being located at a virtual table with the conference participants being envisaged as sitting round the virtual table.

2324. (Currently Amended) A teleconferencing system as claimed in claim 2223, wherein the virtual table is a round table.

2425. (Currently Amended) A teleconferencing system as in claim 2223, wherein the spatial relationships are preserved across the system so that the display at each endpoint represents the view at that endpoint of the spatial relationship of the participants at the virtual table.

2526. (Currently Amended) An endpoint for use as a mesh-connected endpoint in a teleconferencing system comprising a plurality of endpoints, at least some of which are connected in a mesh configuration and at least one of which is connected in a non-mesh configuration to a selected one of the mesh-connected endpoints, wherein a film strip with frames containing reduced-size video feeds from the conference participants is displayed at the mesh endpoints, the mesh-connected endpoint comprising:

a proxy for connection to each of the mesh-connected endpoints to receive video feeds from the mesh-connected endpoints for the non-mesh connected endpoint;

a server associated with the proxy for serving the film strip with frames containing reduced-size video feeds from the mesh-connected conference participants to the non-mesh connected endpoint; and

a proxy controller permitting a user located at the non-mesh connected endpoint to select a video feed on the film strip for promotion to full size and to initiate transfer of the full size video feed to the non-mesh connected endpoint.

REMARKS

Claims 1-25 are pending herein. Claim 1 has been amended to recite “a filmstrip containing simultaneous images or icons representing all of the participants in the teleconference is displayed”. Claims 2 and 9 have been amended to correct typographical errors. Claim 8 has been amended to recite “An endpoint” in the preamble. Misnumbered claims 13 to 26 have been renumbered as claims 12 to 25. Claim 13 has been amended to clarify that the one or more display screens comprises at least two display screens. Claim 13 has also been amended to remove the quotation marks surrounding the term “pushes”. Claims 19 to 22 have been amended to recite “A teleconferencing system” for greater consistency with claim 18. The remaining claims have not been amended.

Rejection of claim 9 under 35 U.S.C. 112 (pre-AIA)

The Examiner has rejected claim 9 under 35 U.S.C. 112 (pre-AIA) as being indefinite. In particular, the Examiner asserts that claim 9 discloses “the video continues to run in the reduced size” and that it is not clear “which video” the applicant refers to, as there is no video claimed in claim 9 or 6 which claim 9 depends from or claim 1 from which claim 6 depends from.

In response, the Applicant has amended claim 9 to depend from claim 5. The Applicant submits that claim 5 recites the feature of “video”.

Rejection of claim 14 under 35 U.S.C. 112 (pre-AIA)

The Examiner has rejected claim 14 under 35 U.S.C. 112 (pre-AIA) as being indefinite. In particular, the Examiner asserts that claim 14 fails to point out what is included or excluded by the claim language. The Examiner asserts that this claim is an omnibus claim. The Examiner asserts that claim 14 discloses {“pushes”}, and the Examiner asserts that it is not clear if this limitation is included or excluded from the claim.

In response, the Applicant has removed the quotation marks around the term “pushes” in claim 13 (previously numbered claim 14). Furthermore, the Applicant has amended claim 13 to recite wherein the one or more display screens comprises at least two display screens.

Objection to claim numbering under 37 CFR 1.126

The Examiner asserts that the numbering of claim is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. The Examiner asserts that claim 12 is missing. The Examiner suggests renumbering misnumbered claims 13-26 as claims 12-25.

In response, the Applicant has renumbered previous claims 13-26 as claims 12-25 and adjusted claim dependencies accordingly.

Rejection of claims 1-10 under pre-AIA 35 U.S.C. 103(a)

The Examiner has rejected claims 1-10 under pre-AIA 35 U.S.C. 103(a) as being unpatentable over *Skramstad* (US 20130027502) in view of *Derocher* (US 20070279484). The Applicant respectfully disagrees with the Examiner's rejection of claims 1-10 for at least the following reasons.

Regarding amended claim 1, the feature of the filmstrip has been amended to recite "a filmstrip containing simultaneous images or icons representing all of the participants in the teleconference is displayed" to better distinguish the carrier of the present application from the cited art. Support for this amendment can be found on page 3, paragraph [0045] of the present application which states:

In one embodiment the filmstrip is located near the lower edge of the screen and is a single row of thumbnails of all videos or collaborations (i.e. document, presentation etc.) from all endpoints in the conference. Showing all sources from all distant end point(s) all of the time, even if they have also been promoted to a larger size, is a key differentiator from prior art endpoints (FIG. 3 described above) in which promotion means that a smaller video is removed on promotion. [emphasis added]

The Examiner asserts that Figure 6B shows the feature of a filmstrip contains simultaneous images or icons representing the participants. Paragraph [0069] of *Skramstad* describes Fig.6B and states in part:

As shown in FIG.6B, as the object is moved into position Y_u within a second interval Z_2 , which, in this example, is associated with a FOCUS+PRESENCE layout, the composite video signal changes into a composite video signal composed based on the FOCUS+PRESENCE layout.

Paragraph [0045] of *Skramstad* defines the FOCUS+PRESENCE layout as: “a “show one participant in full screen and a number of other participants in small frames (FOCUS+PRESENCE)” layout may be associated with a second interval Z₂” [emphasis added]. In other words, the filmstrip of *Skramstad* will show a number of other participants except for the one participant who is in full screen. The Applicant submits that this is in contrast to the present application where the filmstrip of the present application contains simultaneous images or icons representing all of the participants in the teleconference.

The Applicant submits that *Derocher* does not cure the deficiencies of *Skramstad*, as *Derocher* does not teach or suggest “a filmstrip containing simultaneous images or icons representing all of the participants in the teleconference is displayed” as required by amended independent claim 1.

Accordingly, the Applicant submits that amended independent claim 1 is patentable over *Skramstad* in view of *Derocher*.

Regarding amended claims 2-10, these claims ultimately depend upon amended independent claim 1 and, therefore, the Applicant submits that amended claims 2-10 are also patentable over *Skramstad* in view of *Derocher*.

Based on the foregoing, Applicants respectfully request the withdrawal of the 103(a) rejection.

Rejection of claim 11 under pre-AIA 35 U.S.C. 103(a)

The Examiner has rejected claim 11 under pre-AIA 35 U.S.C. 103(a) as being unpatentable over *Skramstad* and *Derocher*, and further in view of U.S. Patent Pub. 20060259552 to *Mock*. In response, the Applicant respectfully disagrees. Claim 11 ultimately depends upon amended independent claim 1 and, therefore, arguments similar to those in respect of amended independent claim 1 apply. The Applicant submits that *Mock* does not teach or suggest the limitations of amended independent claim 1, and hence, claim 11 is patentable over *Skramstad* and *Derocher*, and further in view of *Mock*.

Based on the foregoing, Applicants respectfully request the withdrawal of the 103(a) rejection.

Rejection of claim 12 under pre-AIA 35 U.S.C. 103(a)

The Examiner has rejected claim 12 (previously claim 13) under pre-AIA 35 U.S.C. 103(a) as being unpatentable over *Skramstad* and *Derocher*, and further in view of U.S. Patent Pub. 20130198795 to *Elftheriadis*. In response, the Applicant respectfully disagrees. Claim 12 ultimately depends upon amended independent claim 1 and, therefore, arguments similar to those in respect of amended independent claim 1 apply. The Applicant submits that *Elftheriadis* does not teach or suggest the limitations of amended independent claim 1, and hence, claim 12 is patentable over *Skramstad* and *Derocher*, and further in view of *Elftheriadis*.

Based on the foregoing, Applicants respectfully request the withdrawal of the 103(a) rejection.

Rejection of claim 13 under pre-AIA 35 U.S.C. 103(a)

The Examiner has rejected claim 13 (previously claim 14) under pre-AIA 35 U.S.C. 103(a) as being unpatentable over *Skramstad* and *Derocher*, and further in view of U.S. Patent Pub. 20120154255 to *Hinckley*. In response, the Applicant respectfully disagrees. Claim 13 ultimately depends upon amended independent claim 1 and, therefore, arguments similar to those in respect of amended independent claim 1 apply. The Applicant submits that *Hinckley* does not teach or suggest the limitations of amended independent claim 1, and hence, claim 13 is patentable over *Skramstad* and *Derocher*, and further in view of *Hinckley*.

Based on the foregoing, Applicants respectfully request the withdrawal of the 103(a) rejection.

Rejection of claim 14 under pre-AIA 35 U.S.C. 103(a)

The Examiner has rejected claim 14 (previously claim 15) under pre-AIA 35 U.S.C. 103(a) as being unpatentable over *Skramstad* and *Derocher*, and further in view of U.S. Patent Pub. 20080170550 to *Liu*. In response, the Applicant respectfully disagrees. Claim 14 ultimately depends upon amended independent claim 1 and, therefore, arguments similar to those in respect of amended independent claim 1 apply. The Applicant submits that *Liu* does not teach or suggest the limitations of amended independent claim 1, and hence, claim 14 is patentable over *Skramstad* and *Derocher*, and further in view of *Liu*.

Based on the foregoing, Applicants respectfully request the withdrawal of the 103(a) rejection.

Allowable Subject Matter

The Examiner asserts that claims 15-17 (previously claims 16-18) are objected to as being dependent upon a rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the base claims any intervening claims.

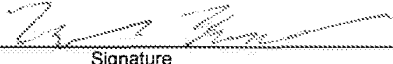
The Applicant thanks the Examiner for her allowability of claims 15-17 if rewritten in independent form. However, as mentioned above, the Applicant submits that amended independent claim 1 is patentable over *Skramstad* in view of *Derocher*. Accordingly, the Applicant submits that claims 15-17 are patentable over *Skramstad* in view of *Derocher* in dependent form.

The Applicant thanks the Examiner for the allowance of claims 18-25 (previously claims 19-26).

In conclusion, early favorable consideration of this application and allowance of claims 1-25 are earnestly solicited.

Respectfully submitted,

BY: 
S. Mark Budd
Reg. No. 53,880
Agent of Record

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)		Docket Number (Optional) 28319-US																														
Application Number 13/755,099	Filed January 31, 2013																															
For VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT																																
Art Unit 2656	Examiner Maria El-Zoobi																															
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): <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"><thead><tr><th></th><th style="text-align: center;">Fee</th><th style="text-align: center;">Small Entity Fee</th><th style="text-align: center;">Micro Entity Fee</th><th></th></tr></thead><tbody><tr><td>☐ One month (37 CFR 1.17(a)(1))</td><td style="text-align: center;">\$200</td><td style="text-align: center;">\$100</td><td style="text-align: center;">\$50</td><td>\$ _____</td></tr><tr><td>☒ Two months (37 CFR 1.17(a)(2))</td><td style="text-align: center;">\$600</td><td style="text-align: center;">\$300</td><td style="text-align: center;">\$150</td><td>\$ 300.00</td></tr><tr><td>☐ Three months (37 CFR 1.17(a)(3))</td><td style="text-align: center;">\$1,400</td><td style="text-align: center;">\$700</td><td style="text-align: center;">\$350</td><td>\$ _____</td></tr><tr><td>☐ Four months (37 CFR 1.17(a)(4))</td><td style="text-align: center;">\$2,200</td><td style="text-align: center;">\$1,100</td><td style="text-align: center;">\$550</td><td>\$ _____</td></tr><tr><td>☐ Five months (37 CFR 1.17(a)(5))</td><td style="text-align: center;">\$3,000</td><td style="text-align: center;">\$1,500</td><td style="text-align: center;">\$750</td><td>\$ _____</td></tr></tbody></table> ☒ 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 <u>131717</u> ☒ 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 <u>53,880</u> ☐ attorney or agent acting under 37 CFR 1.34. Registration number _____  _____ Signature S. Mark Budd _____ Typed or printed name January 29, 2015 _____ Date 613-236-9561 _____ 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*.				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	\$ 300.00	☐ 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	\$ _____
	Fee	Small Entity Fee	Micro Entity Fee																													
☐ One month (37 CFR 1.17(a)(1))	\$200	\$100	\$50	\$ _____																												
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☐ 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	\$ _____																												
☐ * Total of _____ forms are submitted.																																

This collection of information is required by 37 CFR 1.136(a). 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 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Electronic Patent Application Fee Transmittal				
Application Number:		13755099		
Filing Date:		31-Jan-2013		
Title of Invention:		VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT		
First Named Inventor/Applicant Name:		David Brown		
Filer:		Richard J. Mitchell/Carolynn Irvin		
Attorney Docket Number:		28319-US		
Filed as Small Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension - 2 months with \$0 paid	2252	1	300	300
Miscellaneous:				
Total in USD (\$)				300

Electronic Acknowledgement Receipt	
EFS ID:	21343235
Application Number:	13755099
International Application Number:	
Confirmation Number:	1447
Title of Invention:	VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT
First Named Inventor/Applicant Name:	David Brown
Customer Number:	23553
Filer:	Richard J. Mitchell/Carolynn Irvin
Filer Authorized By:	Richard J. Mitchell
Attorney Docket Number:	28319-US
Receipt Date:	29-JAN-2015
Filing Date:	31-JAN-2013
Time Stamp:	13:37:26
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$ 300
RAM confirmation Number	10900
Deposit Account	131717
Authorized User	
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. Section 1.16 (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)	

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	Amendment/Req. Reconsideration-After Non-Final Reject	Response.pdf	20345	no	1
			49c8afb088b38ab9df79874ca07ce6e053268e4e		
Warnings:					
Information:					
2	Claims	Claims.pdf	208950	no	5
			d055b1e3b8ff309db8612bd4879a508b9f390be3		
Warnings:					
Information:					
3	Applicant Arguments/Remarks Made in an Amendment	Remarks.pdf	263299	no	5
			5cfc32afc7a09e67a7b2335b742d128e9862ac6		
Warnings:					
Information:					
4	Extension of Time	Ext.pdf	92304	no	1
			d85559a1013f9b9ef5f2847a52184d7839014bef		
Warnings:					
Information:					
5	Fee Worksheet (SB06)	fee-info.pdf	30727	no	2
			22089123b93994d0a5bf7f96ec38a7700840afdf		
Warnings:					
Information:					
Total Files Size (in bytes):			615625		

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.

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 13/755,099		Filing Date 01/31/2013		☐ To be Mailed		
ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO										
APPLICATION AS FILED – PART I										
		(Column 1)		(Column 2)						
FOR		NUMBER FILED		NUMBER EXTRA		RATE (\$)		FEE (\$)		
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))		N/A		N/A		N/A				
☐ SEARCH FEE (37 CFR 1.16(k), (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										
		(Column 1)		(Column 2)		(Column 3)				
AMENDMENT	01/29/2015		CLAIMS REMAINING AFTER AMENDMENT			HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))		* 25		Minus	** 25	= 0	X \$40 =	0	
	Independent (37 CFR 1.16(h))		* 3		Minus	***3	= 0	X \$210 =	0	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
	TOTAL ADD'L FEE								0	
		(Column 1)		(Column 2)		(Column 3)				
AMENDMENT			CLAIMS REMAINING AFTER AMENDMENT			HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))		*		Minus	**	=	X \$ =		
	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.										

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.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/755,099	01/31/2013	David Brown	28319-US	1447
23553 7590 MARKS & CLERK P.O. BOX 957 STATION B OTTAWA, ON K1P 5S7 CANADA			EXAMINER EL-ZOOBI, MARIA	
			ART UNIT 2656	PAPER NUMBER
			MAIL DATE 08/29/2014	DELIVERY MODE 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.

Office Action Summary	Application No. 13/755,099	Applicant(s) BROWN, DAVID	
	Examiner MARIA EL-ZOOBI	Art Unit 2656	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 1/13/2013.
☐ 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) 1-26 is/are pending in the application.
5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☒ Claim(s) 19-26 is/are allowed.
- 7) ☒ Claim(s) 1-15 is/are rejected.
- 8) ☒ Claim(s) 16-18 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 2/1/2012 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) | 3) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)
Paper No(s)/Mail Date ____ | 4) ☐ Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. 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.

2. Claim 9 is 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. Claim 9 discloses "the video continues to run in the reduced size", it is not clear "which video" the applicant refers to, there is no video claimed in claim 9 or 6 "which claim 9 depend on" or 1 "which claim 6 depend on."
3. Claim 14 rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim. Claim 14 discloses {"pushes"}, it is not clear if this limitation included or excluded from the claim.

Claim Objections

4. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 13-26 been renumbered 12-25, "claim 12 is missing".

Claim Rejections - 35 USC § 103

1. 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 negated by the manner in which the invention was made.

2. Claims 1-10 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Skramstad (Us 20130027502) in view of Derocher (Us 20070279484).

Regarding claim 1, Skramstad discloses, an endpoint for a teleconferencing system wherein multiple parties participate in a teleconference from different locations (Paragraph 20), comprising one or more display screens (Paragraph 38, 58, 66), and which is configured such that a filmstrip containing simultaneous images or icons representing the participants is displayed on said one or more display screens (Fig. 6, see B).

Skramstad discloses that the images representing the participants are spatially mixed and displayed (Paragraph 22)

Skramstad does not explicitly teach the displaying is in a spatial relationship that represents their real-world or virtual-world spatial relationships.

Derocher in the same art of endeavor discloses a video conference with multiple parties in different location wherein displaying the images of the participants is in a

spatial relationship that represents their real-world or virtual-world spatial relationships (abstract, Paragraph 24, 15, 33).

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Skramstad with Derocher in order to improve the system and enhance the conferencing experience and provide awareness of the display location of remote studio(s).

Regarding claim 2, Skramstad in view of Derocher discloses, wherein the images or icons are displayed in a spatial relationship that represents the participants as being located at a virtual table with the conference participants being envisaged as sitting round the virtual table (Derocher: Fig. 5-7)

Regarding claim 3, Skramstad in view of Derocher discloses, wherein the virtual table is a round table (Derocher: Fig. 1, Paragraph 17-20).

Regarding claim 4, Skramstad in view of Derocher discloses, wherein the spatial relationships are preserved across the system so that the display at each endpoint represents the view at that endpoint of the spatial relationship of the participants at the virtual table (Derocher: Fig. 5-7, Paragraph 17-20).

Regarding claim 5, Skramstad in view of Derocher discloses, wherein the images or icons are in the form of video (Skramstad: Fig. 6).

Regarding claim 6, Skramstad in view of Derocher discloses, wherein the images or icons are promotable and demotable between a full or intermediate size and a reduced size in response to an event (Skramstad: Paragraph 22-26, 39, 41-45).

Regarding claim 7, Skramstad in view of Derocher discloses, wherein the event is a user interaction (Skramstad: Paragraph 22-26, 39, 41-45).

Regarding claim 8, Skramstad in view of Derocher discloses, wherein the user interaction is in the form of a mouse click (Skramstad: Paragraph 48).

Regarding claim 9, Skramstad in view of Derocher discloses, which is configured such that when a reduced size image is promoted to full size, the video continues to run in the reduced size image, which retains its spatial relationship with the other images representing the real-world or virtual world spatial relationships of the participants (Skramstad: Fig. 6).

Regarding claim 10, Skramstad in view of Derocher discloses, which is further configured to display collaboration images or icons representing presentations from conference participants on said one or more display screens at a conference location in a spatial relationship that represents their real-world or virtual-world spatial relationships (Skramstad: Paragraph 23, 67).

3. Claim 11 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Skramstad (Us 20130027502) in view of Derocher (Us 20070279484) and further in view of Mock (US 20060259552).

Regarding claim 11, Skramstad in view of Derocher discloses, presentation (see claim 10).

Skramstad in view of Derocher does not disclose wherein collaboration images or icons are positioned close to the image or icon representing the participant making the presentation.

Mock discloses video conference between multiple parties wherein collaboration images or icons are positioned close to the image or icon representing the participant making the presentation (Fig. 6A).

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Skramstad with Mock in order to improve the system and enhance the conferencing experience and allow the participants to easily recognize the presenter.

3. Claim 12 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Skramstad (Us 20130027502) in view of Derocher (Us 20070279484) and further in view of Elftheriadis (US 20130198795).

Regarding claim 12 “previously 13”, Skramstad in view of Derocher discloses, the claimed endpoint.

Skramstad in view of Derocher does not teach which is configured such that a newly added item is immediately promoted.

Elftheriadis teach in a video communication a newly added item is immediately promoted (Paragraph 140, abstract).

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Skramstad with Mock in order to improve the system and enhance the conferencing experience and allow the participants to easily recognize the newly added item.

Claim 13 “previously 14” is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Skramstad (Us 20130027502) in view of Derocher (Us 20070279484) and further in view of Hinckley (Us 20120154255).

Regarding claim 13 “previously 14”, Skramstad in view of Derocher discloses, comprising at least two display screens (Skramstad: (Paragraph 38, 58, 66)).

Skramstad in view of Derocher does not teach wherein the images or icons are draggable between the different display screens, and wherein an image or icon dragged to another display screen “pushes” images or icons ahead of it so as to preserve the order of the images or icons and thus their spatial relationship.

Hinckley discloses two displays for endpoint wherein an image can be dragged from one into another (Paragraph 6, 7, 20, 44, 69).

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Skramstad with Hinckley in order to improve the system and enhance the conferencing experience

Claim 14 “previously 15” is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Skramstad (Us 20130027502) in view of Derocher (Us 20070279484) and further in view of Liu (US 20080170550).

Regarding claim 14 “previously 15”, Skramstad in view of Derocher discloses, the claimed endpoint.

Skramstad in view of Derocher does not disclose wherein the end participants are connected over a mesh network, and a proxy at one of the endpoints receives video feeds for presentation to a user at a non-mesh connected endpoint.

Liu discloses a mesh- based connected node and wherein the non-mesh node receive the data through a proxy (Paragraph 29-30, 46).

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Skramstad with Liu in order to improve the system by providing fully connected wired networks have the advantages of security and reliability: problems in a cable affect only the two nodes attached to it. However, in such networks, the number of cables, and therefore the cost, goes up rapidly as the number of nodes increases.

Allowable Subject Matter

4. Claims 15-17; previously 16-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 18-25 “previously 19-26” are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARIA EL-ZOBI whose telephone number is (571)270-3434. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Curtis Kuntz can be reached on 5712727499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/MARIA EL-ZOOBI/
Primary Examiner, Art Unit 2656

Notice of References Cited	Application/Control No. 13/755,099	Applicant(s)/Patent Under Reexamination BROWN, DAVID	
	Examiner MARIA EL-ZOOBI	Art Unit 2656	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2007/0279484	12-2007	Derocher et al.	348/14.09
*	B	US-2006/0259552	11-2006	Mock et al.	709/204
*	C	US-2013/0198795	08-2013	Eleftheriadis et al.	725/118
*	D	US-2012/0154255	06-2012	Hinckley et al.	348/14.08
*	E	US-2008/0170550	07-2008	Liu et al.	370/338
	F	US-			
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		13755099
	Filing Date		2013-01-31
	First Named Inventor	BROWN, David	
	Art Unit	2656	
	Examiner Name		
	Attorney Docket Number	28319-US	

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	1	20080267282	A1	2008-10-30	Kalipatnapu, Rajah K V R et al.		
	2	20110187813	A1	2011-08-04	Musgrave, Peter		
	3	20070285506	A1	2007-12-13	Schneider, Roland		
	4	20110047487	A1	2011-02-24	DeWeese, Toby et al.		
	5	20110205332	A1	2011-08-25	Jeong, Hyeonkuk et al.		
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	Filing Date		2013-01-31	
	First Named Inventor	BROWN, David		
	Art Unit	2656		
	Examiner Name			
	Attorney Docket Number	28319-US		

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	13755099
Filing Date	2013-01-31
First Named Inventor	BROWN, David
Art Unit	2656
Examiner Name	
Attorney Docket Number	28319-US

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).

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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	/rjmitchell34519/	Date (YYYY-MM-DD)	2013-08-07
Name/Print	Richard J. Mitchell	Registration Number	34,519

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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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	4	(images icons video)with draggable with (different two) with (display screens)	US-PGPUB; USPAT	OR	ON	2014/08/13 15:03
L2	4	1 AND ((G06F3/04817 OR G06F3/0482 OR G06F3/0486 OR G06F1/1694 OR G06F3/017 OR G06F3/0487 OR G06T11/206 OR H04N7/152 OR H04W4/02).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 15:05
L3	254	(endpoint computer device) with (two near2 (display screen))and (video near1 conferenc\$3) and (drag drag\$4)	US-PGPUB; USPAT	OR	ON	2014/08/13 15:08
L4	134	3 AND ((G06F3/017 OR G06F3/011 OR G06F3/013 OR G06F3/005 OR G06F1/163 OR G06F17/00 OR G06F2203/0331 OR H04N7/15 OR H04N7/147 OR H04N2007/145 OR H04N7/142 OR H04N13/0468 OR H04N21/4307 OR H04N21/431 OR H04N21/4788 OR H04N21/632 OR H04N5/23238 OR H04N5/268 OR H04N7/141 OR H04N7/152 OR H04N7/183).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 15:09
L5	3	(endpoint computer device) with (two near2 (display screen))with (drag\$3 push\$3) and (video near1 conferenc\$3)	US-PGPUB; USPAT	OR	ON	2014/08/13 15:09
L6	3	5 AND ((F16M13/02 OR H04N5/64 OR H04N7/152 OR Y10S345/905).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 15:10
L7	1	13/755099 and drag	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/08/13 15:11
L28	129	mesh and proxy and (non near2 mesh)	US-PGPUB; USPAT	OR	ON	2014/08/13 15:43
L29	73	28 AND ((H04W84/18 OR H04W40/02 OR H04W40/28 OR H04W40/24 OR H04W48/08 OR H04W76/02 OR H04W88/08 OR H04W12/06 OR H04W40/12 OR H04W40/246 OR H04W40/34 OR H04W40/36 OR H04W8/005 OR H04W8/26 OR H04W12/02 OR H04W36/08 OR H04W40/10 OR H04W40/26 OR H04W4/003 OR H04W4/06 OR H04W84/22 OR H04W88/06 OR H04W36/0005 OR H04W36/18 OR H04W40/005 OR H04W40/248 OR H04W40/32 OR H04W48/17 OR H04W48/20 OR H04W4/12 OR H04W52/0219 OR H04W68/00 OR	US-PGPUB; USPAT	OR	ON	2014/08/13 15:44

		H04W68/08 OR H04W72/1236 OR H04W74/0808 OR H04W80/04 OR H04W84/12 OR H04W88/10 OR H04W8/085 OR H04W8/087 OR G06Q10/00 OR G05D17/00 OR G07F15/008 OR H04N21/4126 OR H04N21/43615 OR H04N21/4333 OR H04N21/439 OR H04N21/6581 OR H04N21/8113 OR H04N7/152).CPC.)				
L30	92	mesh and proxy and (non near2 mesh)and server	US-PGPUB; USPAT	OR	ON	2014/08/13 15:44
L31	69	30 AND ((H04W84/18 OR H04W76/02 OR H04W40/02 OR H04W12/06 OR H04W48/08 OR H04W88/08 OR H04W40/24 OR H04W8/005 OR H04W8/26 OR H04W40/246 OR H04W40/28 OR H04W40/36 OR H04W40/12 OR H04W4/06 OR H04W12/02 OR H04W36/18 OR H04W40/26 OR H04W4/003 OR H04W4/12 OR H04W72/1236 OR H04W74/0808 OR H04W36/0005 OR H04W40/005 OR H04W40/248 OR H04W40/32 OR H04W48/17 OR H04W48/20 OR H04W52/0219 OR H04W68/00 OR H04W68/08 OR H04W80/04 OR H04W84/12 OR H04W84/22 OR H04W88/10 OR H04W8/085 OR H04W8/087 OR G06Q10/00 OR G06Q20/102 OR G06Q20/145 OR G06Q30/0283 OR G06Q30/04 OR G06Q50/06 OR G06Q30/0241 OR G06Q10/10 OR G06Q30/0277 OR G06Q50/18 OR G06Q30/0251 OR G06Q10/02 OR G06Q30/0267 OR G06Q30/0603 OR G06Q30/08 OR G06Q40/04 OR G06Q40/06 OR G06Q40/08 OR G05D17/00 OR G05D3/12 OR H04M15/08 OR H04M15/8083 OR H04M2215/0184 OR H04M2215/0192 OR H04M2215/62 OR H04M15/00 OR H04M3/4878 OR H04N21/4126 OR H04N21/43615 OR H04N21/4333 OR H04N21/439 OR H04N21/6581 OR H04N21/8113 OR H04N7/152).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 15:44
S1	1	13/755099	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/08/11 16:39
S2	509	(video near1 conferenc\$3) and virtual and (display\$3 with spatial)	US-PGPUB; USPAT	OR	ON	2014/08/12 07:30
S3	184	S2 AND ((G06F3/017 OR G06F3/011 OR G06F17/30041 OR G06F17/30056 OR H04N7/15 OR H04N7/157 OR H04N7/147 OR H04N7/152 OR H04N9/3194).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/12 07:31
S4	92	S2 AND ((H04N7/15 OR H04N7/157 OR H04N7/147 OR H04N7/152 OR H04N9/3194).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/12 07:31

S5	95	(video near1 conferenc\$3) and virtual and (display\$3 with spatial)and real and mimic	US-PGPUB; USPAT	OR	ON	2014/08/12 07:31
S6	9	S5 AND ((H04N7/15 OR H04N21/4305 OR H04N5/2254 OR H04N5/2259 OR H04N5/23238 OR H04N9/3161 OR H04N9/3173 OR H04N13/0468 OR H04N7/142 OR H04N9/3185 OR H04N9/3194).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/12 07:32
S7	5	"5,999208".pn. "6,624841".pn. "7,111045".pn. "20110103624" "5,335011".pn.	US-PGPUB; USPAT	OR	ON	2014/08/12 10:54
S8	5	("20080267282" "20110187813" "20070285506" "20110047487" "20110205332") .pn.	US-PGPUB; USPAT	OR	ON	2014/08/12 10:55
S9	160	(video near1 conferenc\$3) and virtual and (display\$3 with spatial)and mesh	US-PGPUB; USPAT	OR	ON	2014/08/12 10:58
S10	14	S9 AND ((H04N7/147 OR H04N7/15 OR H04N7/157 OR H04N21/4312 OR H04N21/4314 OR H04N13/0468 OR H04N19/00575 OR H04N21/233 OR H04N21/234363 OR H04N21/234381 OR H04N21/42203 OR H04N21/4223 OR H04N21/4788 OR H04N7/142 OR H04N7/152 OR H04M3/567 OR H04M2203/5072).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/12 10:58
S12	0	david.in. and brown.in. and conferenc\$3.dlm. and mesh .dlm. and virtual.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/08/12 11:01
S13	70	david.in. and brown.in. and virtual.dlm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/08/12 11:02
S14	2	david.in. and brown.in. and virtual.dlm. and spatial.dlm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/08/12 11:02
S15	11	david.in. and brown.in. and virtual.dlm. and conferenc\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/08/12 11:03
S16	2	david.in. and brown.in. and virtual.dlm. and conferenc\$3 and proxy	US-PGPUB; USPAT	OR	ON	2014/08/12 12:09
S17	2	S16 AND ((H04N21/4782 OR H04N21/4828 OR H04N7/152).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/12 12:10
S18	77	(video near1 conferenc\$3) and virtual and (display\$3 with spatial)and proxy	US-PGPUB; USPAT	OR	ON	2014/08/12 12:14

S19	1	13/755099 and proxy and server	US-PGPUB; USPAT	OR	ON	2014/08/13 09:46
S20	76	(video near1 conferenc\$3) and virtual and (display\$3 with spatial)and proxy and server	US-PGPUB; USPAT	OR	ON	2014/08/13 09:49
S21	24	S20 AND ((H04N21/44222 OR H04N2005/91328 OR H04N2005/91364 OR H04N21/4131 OR H04N21/42201 OR H04N21/4532 OR H04N21/47 OR H04N5/782 OR H04N5/913 OR H04N19/0043 OR H04N19/00781 OR H04N19/00933 OR H04N21/2662 OR H04N21/4318 OR H04N21/44008 OR H04N21/4621 OR H04N21/4668 OR H04N21/475 OR H04N7/163 OR H04N7/152 OR H04N19/00127 OR H04N19/00242 OR H04N19/00266 OR H04N19/00278 OR H04N19/00436 OR H04N19/00448 OR H04N19/00454 OR H04N19/00715 OR H04N19/00721 OR H04N19/00727 OR H04N19/00751 OR H04N21/234327 OR H04N21/4223 OR H04N21/4316 OR H04N21/4438 OR H04N21/4788 OR H04N21/631 OR H04N21/6375 OR H04N21/6379 OR H04N21/6405 OR H04N21/6583 OR H04N7/18).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 09:49
S22	14	"8,736660".pn. "8,542266".pn. "8,446454".pn. "7,889226".pn. "7,884843".pn. "8,139100".pn. "7,593986".pn. "20110187813" "8,427520".pn. "5,740161".pn. "6,020915".pn. "7,113200".pn. "20070206089"	US-PGPUB; USPAT	OR	ON	2014/08/13 10:02
S23	12	S22 AND ((H04N7/152 OR H04N7/15 OR H04N7/147 OR H04N13/0484 OR H04N2213/006 OR H04N5/272 OR H04N7/142 OR H04M3/567 OR H04M2201/50 OR H04M3/563 OR H04M3/565 OR H04M2201/41 OR H04M3/42221).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 10:02
S25	3	(video near1 conferenc\$3) and virtual and (display\$3 with spatial) and filmstrip	US-PGPUB; USPAT	OR	ON	2014/08/13 10:07
S26	3	S25 AND ((H04N21/4305 OR H04N5/2254 OR H04N5/2259 OR H04N5/23238 OR H04N7/152).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 10:07
S27	3	(video near1 conferenc\$3) and virtual and (display\$3 with spatial)and ((image video) with film\$strip\$1)	US-PGPUB; USPAT	OR	ON	2014/08/13 10:15
S28	3	S27 AND ((H04N21/4305 OR H04N5/2254 OR H04N5/2259 OR H04N5/23238 OR H04N7/152).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 10:15
S29	3	(video near1 conferenc\$3) and (display\$3 with spatial)and ((image video) with film\$strip\$1)	US-PGPUB; USPAT	OR	ON	2014/08/13 10:15
S30	3	S29 AND ((H04N21/4305 OR H04N5/2254 OR H04N5/2259 OR H04N5/23238 OR H04N7/152).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 10:16
S31	33	(video near1 conferenc\$3) and ((image video) with film\$strip\$1)	US-PGPUB; USPAT	OR	ON	2014/08/13 10:16

S32	9	S31 AND ((H04N7/147 OR H04N7/15 OR H04N21/4307 OR H04N21/4788 OR H04N21/2368 OR H04N21/4135 OR H04N21/42203 OR H04N21/4223 OR H04N21/4341 OR H04N21/4621 OR H04N21/485 OR H04N21/6118 OR H04N21/6168 OR H04N21/632 OR H04N21/643 OR H04N21/64322 OR H04N21/2381 OR H04N21/4305 OR H04N21/4316 OR H04N21/4325 OR H04N21/4334 OR H04N21/4363 OR H04N21/4381 OR H04N5/2254 OR H04N5/2259 OR H04N5/23238 OR H04N21/4143 OR H04N21/4312 OR H04N21/4314 OR H04N21/440227 OR H04N21/44222 OR H04N21/8133 OR H04N21/8173 OR H04N21/8405 OR H04N7/152).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 10:16
S33	1	13/755099 and filmstrip	US-PGPUB; USPAT	OR	ON	2014/08/13 10:17
S34	19	"7,185054".pn. "7,111045".pn. "5,335011".pn. "5,999208".pn. "6,624841".pn. "20110103624".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/08/13 10:23
S35	783	(video near1 conferenc\$3) and (display\$3 with spatial)	US-PGPUB; USPAT	OR	ON	2014/08/13 10:50
S36	318	S35 AND ((H04N7/15 OR H04N7/147 OR H04N7/157 OR H04N19/00533 OR H04N19/00757 OR H04N7/152 OR H04N13/0468 OR H04N9/3194 OR H04N13/0402 OR H04N13/0459 OR H04N19/00436 OR H04N19/00569 OR H04N19/00854 OR H04N19/00884 OR H04N19/00903 OR H04N19/00909 OR H04N2005/91328 OR H04N2005/91364 OR H04N21/4131 OR H04N21/42201 OR H04N21/44218 OR H04N21/44222 OR H04N21/4532 OR H04N21/47 OR H04N21/4788 OR H04N5/782 OR H04N5/913 OR H04N7/142 OR H04N9/3129 OR H04N9/3155 OR H04N9/3164 OR H04N9/3173 OR H04N9/3185 OR H04N13/0007 OR H04N13/0022 OR H04N13/0059 OR H04N13/04 OR H04N13/0413 OR H04N13/0422 OR H04N13/0425 OR H04N13/0431 OR H04N13/0434 OR H04N13/0447 OR H04N17/02 OR H04N19/00 OR H04N19/00066 OR H04N19/00096 OR H04N19/00121 OR H04N19/00127 OR H04N19/00206 OR H04N19/0023 OR H04N19/00303 OR H04N19/004 OR H04N19/00424 OR H04N19/0043 OR H04N19/00442 OR H04N19/00563 OR H04N19/00575 OR H04N19/00587 OR H04N19/0069 OR H04N19/00733 OR H04N19/00763 OR H04N19/00775 OR H04N19/00781 OR H04N19/00806 OR H04N19/00818 OR H04N19/00824 OR H04N19/00921 OR	US-PGPUB; USPAT	OR	ON	2014/08/13 10:50

		H04N19/00927 OR H04N19/00963 OR H04N1/6033 OR H04N1/6052 OR H04N21/2343 OR H04N21/234327 OR H04N21/2365 OR H04N21/2668 OR H04N21/278 OR H04N21/42203 OR H04N21/4223 OR H04N21/4307 OR H04N21/44008 OR H04N21/6587 OR H04N21/816 OR H04N5/225 OR H04N5/23216 OR H04N5/4403 OR H04N5/44591 OR H04N7/144 OR H04N7/181 OR H04N7/183 OR H04N9/3147 OR H04N9/3182 OR H04N9/68 OR H04N9/73 OR H04N9/74).CPC.)				
S37	130	(video near1 conferenc\$3) and (display\$3 with spatial) and endpoint	US-PGPUB; USPAT	OR	ON	2014/08/13 10:51
S38	83	S37 AND ((H04N7/152 OR H04N19/0043 OR H04N19/00781 OR H04N21/44222 OR H04N19/00933 OR H04N2005/91328 OR H04N2005/91364 OR H04N21/4131 OR H04N21/42201 OR H04N21/4532 OR H04N21/47 OR H04N5/782 OR H04N5/913 OR H04N9/3194 OR H04N19/00436 OR H04N19/00448 OR H04N19/00424 OR H04N19/00472 OR H04N19/00533 OR H04N19/00763 OR H04N19/00854 OR H04N21/234327 OR H04N21/2662 OR H04N21/4621 OR H04N7/14 OR H04N9/3182 OR H04N17/02 OR H04N19/00418 OR H04N19/00545 OR H04N19/00939 OR H04N1/6033 OR H04N1/6052 OR H04N7/15 OR H04N9/3147 OR H04N9/68 OR H04N9/73 OR H04N19/00127 OR H04N19/00454 OR H04N19/00563 OR H04N19/00587 OR H04N19/00715 OR H04N19/00721 OR H04N19/00751 OR H04N19/00757 OR H04N7/142 OR H04N7/147 OR H04N7/181 OR H04N9/3185 OR H04N9/3197 OR H04N19/00242 OR H04N19/00266 OR H04N19/00278 OR H04N19/00727 OR H04N21/4223 OR H04N21/4305 OR H04N21/4316 OR H04N21/4438 OR H04N21/4788 OR H04N21/631 OR H04N21/6375 OR H04N21/6379 OR H04N21/6405 OR H04N21/6583 OR H04N5/2254 OR H04N5/2259 OR H04N5/23238 OR H04N13/0048 OR H04N13/0468 OR H04N19/00024 OR H04N19/0003 OR H04N19/00169 OR H04N19/0023 OR H04N19/00236 OR H04N19/00321 OR H04N19/00442 OR H04N19/00575 OR H04N19/00769 OR H04N19/00884 OR H04N1/00204 OR H04N1/00236 OR H04N1/00244 OR H04N1/00307 OR H04N1/00355 OR H04N1/00363 OR H04N1/00374 OR H04N1/00968 OR H04N1/00973 OR H04N21/234363 OR H04N21/234381 OR H04N21/431 OR H04N21/4314 OR H04N21/4318 OR H04N21/4383 OR H04N21/4384 OR H04N21/44008 OR H04N21/440227 OR H04N21/4668 OR	US-PGPUB; USPAT	OR	ON	2014/08/13 10:51

		H04N21/475 OR H04N21/64322 OR H04N21/8451 OR H04N21/8549 OR H04N2201/3249 OR H04N2201/3269 OR H04N2201/3273 OR H04N2201/3278 OR H04N2201/328 OR H04N5/765 OR H04N5/772 OR H04N5/775 OR H04N5/783 OR H04N5/85 OR H04N7/157 OR H04N7/163 OR H04N9/8042 OR H04N9/8205).CPC.)				
S39	139	(video near1 conferenc\$3) and (display\$3 with spatial with (image video)) and GUI	US-PGPUB; USPAT	OR	ON	2014/08/13 11:03
S40	56	S39 AND ((H04N19/00127 OR H04N21/234363 OR H04N21/234381 OR H04N21/44222 OR H04N19/00781 OR H04N2005/91328 OR H04N2005/91364 OR H04N21/233 OR H04N21/4131 OR H04N21/42201 OR H04N21/4532 OR H04N21/47 OR H04N5/782 OR H04N5/913 OR H04N19/0009 OR H04N19/00133 OR H04N19/00751 OR H04N21/23412 OR H04N21/234336 OR H04N21/234354 OR H04N21/23655 OR H04N21/2402 OR H04N21/2407 OR H04N21/241 OR H04N21/2543 OR H04N21/262 OR H04N21/2668 OR H04N21/274 OR H04N21/478 OR H04N21/488 OR H04N21/6168 OR H04N21/6187 OR H04N21/6405 OR H04N21/6408 OR H04N21/6547 OR H04N21/6587 OR H04N21/812 OR H04N21/8173 OR H04N21/8453 OR H04N21/8543 OR H04N21/8586 OR H04N7/147 OR H04N7/165 OR H04N9/3194 OR H04N7/15 OR H04N7/142 OR H04N9/3129 OR H04N9/3155 OR H04N9/3164 OR H04N9/3173 OR H04N9/3185 OR H04N17/02 OR H04N19/00139 OR H04N19/00309 OR H04N19/00757 OR H04N19/00957 OR H04N1/6033 OR H04N1/6052 OR H04N2007/145 OR H04N21/4314 OR H04N7/148 OR H04N7/152 OR H04N9/3182 OR H04N9/68 OR H04N9/73 OR H04N21/4312 OR H04N13/0409 OR H04N13/0454 OR H04N13/0468 OR H04N13/0497 OR H04N19/0023 OR H04N19/0043 OR H04N19/00436 OR H04N19/00472 OR H04N1/00307 OR H04N1/0044 OR H04N21/234327 OR H04N21/42203 OR H04N21/4223 OR H04N21/431 OR H04N21/4318 OR H04N21/4383 OR H04N21/4384 OR H04N21/44008 OR H04N21/440227 OR H04N21/4621 OR H04N21/4668 OR H04N21/475 OR H04N21/4788 OR H04N21/64322 OR H04N21/8549 OR H04N5/23216 OR H04N5/765 OR H04N5/772 OR H04N5/775 OR H04N5/783 OR H04N5/85 OR H04N7/157 OR H04N7/163 OR H04N7/18 OR H04N7/183 OR H04N7/26313 OR H04N7/26882 OR H04N9/8042 OR H04N9/8205).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 11:03

S41	27	S40 not S38	US-PGPUB; USPAT	OR	ON	2014/08/13 11:04
S42	26762	(endpoint computer device) with (two near2 (display screen))	US-PGPUB; USPAT	OR	ON	2014/08/13 11:48
S43	740	(endpoint computer device) with (two near2 (display screen))and (video near1 conferenc\$3)	US-PGPUB; USPAT	OR	ON	2014/08/13 11:49
S44	257	S43 AND ((H04N21/44222 OR H04N21/4532 OR H04N21/47 OR H04N21/482 OR H04N21/6125 OR H04N21/8173 OR H04N21/488 OR H04N21/8126 OR H04N5/4403 OR H04N17/04 OR H04N21/25808 OR H04N21/26291 OR H04N21/42204 OR H04N21/4307 OR H04N21/4316 OR H04N21/432 OR H04N21/433 OR H04N21/435 OR H04N21/437 OR H04N21/4396 OR H04N21/442 OR H04N21/44204 OR H04N21/44213 OR H04N21/4622 OR H04N21/472 OR H04N21/47202 OR H04N21/4755 OR H04N21/478 OR H04N21/4788 OR H04N21/4821 OR H04N21/4823 OR H04N21/4828 OR H04N21/485 OR H04N21/4858 OR H04N21/4882 OR H04N21/6175 OR H04N21/8133 OR H04N21/8166 OR H04N21/8358 OR H04N21/84 OR H04N5/445 OR H04N5/50 OR H04N7/15 OR H04N7/147 OR H04N13/0468 OR H04N2005/91328 OR H04N2005/91364 OR H04N21/4131 OR H04N21/42201 OR H04N21/43635 OR H04N5/23238 OR H04N5/782 OR H04N5/913 OR H04N13/0018 OR H04N13/0033 OR H04N13/0059 OR H04N13/02 OR H04N13/0242 OR H04N13/0253 OR H04N13/0278 OR H04N1/58 OR H04N1/60 OR H04N2005/4433 OR H04N2005/44565 OR H04N21/23406 OR H04N21/23439 OR H04N21/4122 OR H04N21/42219 OR H04N21/43615 OR H04N21/44004 OR H04N21/4402 OR H04N21/45 OR H04N21/4516 OR H04N21/45455 OR H04N21/4782 OR H04N21/65 OR H04N21/8153 OR H04N2213/003 OR H04N5/232 OR H04N5/23216 OR H04N5/23219 OR H04N5/23245 OR H04N5/23293 OR H04N5/2628 OR H04N5/268 OR H04N5/44543 OR H04N7/14 OR H04N7/141 OR H04N7/142 OR H04N7/144 OR H04N7/152 OR H04N7/155 OR H04N7/157 OR H04N7/183 OR H04N7/26 OR H04N9/75 OR H04L51/32 OR H04L12/1827 OR H04L43/0852 OR H04L63/08 OR H04L65/1069 OR H04L65/403 OR H04L67/025 OR H04L67/38).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 11:49
S45	67	(endpoint computer device) with (two near2 (display screen))same (video near1 conferenc\$3)	US-PGPUB; USPAT	OR	ON	2014/08/13 11:49
S46	45	S45 AND ((H04N7/15 OR H04N7/147 OR	US-PGPUB;	OR	ON	2014/08/13

		H04N7/141 OR H04N7/144 OR H04N7/142 OR H04N2007/145 OR H04N7/152 OR H04N13/0003 OR H04N13/0037 OR H04N13/0278 OR H04N5/2251 OR H04N7/157 OR H04N1/00283 OR H04N1/00299 OR H04N1/195 OR H04N1/19594 OR H04N21/242 OR H04N21/42203 OR H04N21/4223 OR H04N21/4307 OR H04N21/4312 OR H04N21/4788 OR H04N21/8547 OR H04N2201/0436 OR H04N5/04 OR H04N7/155 OR H04N7/26 OR H04N9/75 OR H04M3/562).CPC.)	USPAT			11:50
S47	4	"20130027502" "20130198629" "20070279484"	US-PGPUB; USPAT	OR	ON	2014/08/13 12:12
S48	4	"20130027502" "20130198629" "20070279484" and (presentation)	US-PGPUB; USPAT	OR	ON	2014/08/13 13:22
S49	4	("20130027502" "20130198629" "20070279484") and (presentation point lecture)	US-PGPUB; USPAT	OR	ON	2014/08/13 13:26
S50	1	mesh with proxy with (non near1 mesh) and conferenc\$3	US-PGPUB; USPAT	OR	ON	2014/08/13 13:30
S51	1	mesh and proxy with (non near1 mesh) and conferenc\$3	US-PGPUB; USPAT	OR	ON	2014/08/13 13:30
S52	20	mesh and proxy and (non near1 mesh) and conferenc\$3	US-PGPUB; USPAT	OR	ON	2014/08/13 13:31
S53	7	(enlarg\$3 (maximize near1 size)) with (new newly) with added with (user participants document) and conferenc\$3	US-PGPUB; USPAT	OR	ON	2014/08/13 14:23
S54	7	S53 AND ((G06F17/30247 OR G06K9/00288 OR G06K9/00295 OR G06K9/00208 OR G06K9/622 OR G06K9/00221 OR G06K9/00228 OR G06K9/00677).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 14:23
S55	10	(enlarg\$3 (maximize near1 size)) with (new newly) with added with (user participant document) and conferenc\$3	US-PGPUB; USPAT	OR	ON	2014/08/13 14:24
S56	3	S55 AND ((H04N21/234327 OR H04N21/2662 OR H04N21/4314 OR H04N21/4622 OR H04N21/4858 OR H04N21/654 OR H04N21/6587 OR H04N7/152).CPC.)	US-PGPUB; USPAT	OR	ON	2014/08/13 14:24

8/13/2014 4:13:42 PM

C:\Users\melzoobi\Documents\EAST\Workspaces\13755099.wsp

Search Notes 	Application/Control No. 13755099	Applicant(s)/Patent Under Reexamination BROWN, DAVID
	Examiner MARIA EL-ZOOBI	Art Unit 2656

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
CPC search with text search	8/13/2014	
inventor name search	8/13/2014	M.EL
plus search	8/13/2014	M.EL

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

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		13755099
	Filing Date		2013-01-31
	First Named Inventor	BROWN, David	
	Art Unit	2656	
	Examiner Name		
	Attorney Docket Number	28319-US	

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

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		13755099
	Filing Date		2013-01-31
	First Named Inventor	BROWN, David	
	Art Unit	2656	
	Examiner Name		
	Attorney Docket Number	28319-US	

1	"Multiview: Improving Trust in Group Video Conferencing Through Spatial Faithfulness", David Nguyen et al., Berkeley Institute of Design, University of California, ACM Conference on Human Factors in Computer Systems, 2007, Pages 1465-1474.	☐
2	"eyeView: Focus+Context Views for Large Group Video Conferences", T. Jenkin et al., Queens University, Kingston, ON, Proceedings of the ACM Conference on Human Factors in Computer Systems (CHI), 2006, Pages 1497-1500.	☐
3	"Development of Teleconferencing Methodologies With Emphasis on Virtual Space Video and Interactive Graphics", Linda B. Allardyce et al., DARPA Technical Report, Washington, D.C., DDI/TR 83-4-314.73, April 1983, Pages 1-88.	☐
4	"Virtual Video Conferencing Using 3D Model-Assisted Image-Based Rendering", Peter Eisert, Fraunhofer Institute for Telecommunications, Image Processing Department, Berlin, Germany.	☐

If you wish to add additional non-patent literature document citation information please click the Add button **Add**

EXAMINER SIGNATURE

Examiner Signature	/Maria El-zoobi/	Date Considered	08/11/2014
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*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.

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	13755099
Filing Date	2013-01-31
First Named Inventor	BROWN, David
Art Unit	2656
Examiner Name	
Attorney Docket Number	28319-US

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	/rjmitchell34519/	Date (YYYY-MM-DD)	2013-04-25
Name/Print	Richard J. Mitchell	Registration Number	34,519

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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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.

<i>Index of Claims</i> 	Application/Control No. 13755099	Applicant(s)/Patent Under Reexamination BROWN, DAVID
	Examiner MARIA EL-ZOOBI	Art Unit 2656

✓	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	08/13/2014									
	1	✓									
	2	✓									
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PLUS Search Results for S/N 13755099, Searched Wed Aug 06 11:27:11 EDT 2014
The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

20130194378 99	20080316298 81
7593986 86	
20060253532 86	
20110187813 86	
7461126 81	
8427520 81	
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PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Agent's Docket No. 28319-US

In re Application of	)	Confirmation No.: 1447
	)	
BROWN, David	)	
	)	
Serial No: 13/755,099	)	Art Unit: 2656
	)	
Filed: January 31, 2013	)	Examiner: KUNTZ, CURTIS A
	)	

For: **VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL
CONTEXT**

August 23, 2013

**Commissioner for Patents
U.S. Patent and Trademark Office
Randolph Building
401 Dulany Street
Alexandria, VA 22314
U.S.A.**

TRANSMITTAL LETTER

Sir:

Applicant hereby submits a Supplemental Declaration in respect of the above
referenced patent application:

Applicant paid the surcharge for the late filing fee of an oath/declaration on February
20, 2013. However, please charge any applicable Government fees, as required, to our
Deposit Account 13-1717.

Respectfully submitted,

BY: 

Richard J. Mitchell
Reg. No. 34,519
Agent of Record

**MARKS & CLERK
P. O. Box 957, Station B
Ottawa, Ontario Canada K1P 5S7 (613) 236-9561**

SUPPLEMENTAL DECLARATION

As a below named inventor, I/we hereby declare that:

Each inventor's residence, mailing address, and citizenship are as stated below next to their names.

I/we believe the inventor(s) named below to be the original inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT

- ☐ the specification of which is attached hereto.
- ☒ the specification of which was filed on January 31, 2013, as
U.S. Patent Application No. 13/755,099.
- ☐ as amended on _____, 2013

The above-identified application was made or authorized by the below named inventor(s). I/we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above.

I/we acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I/we hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patents or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Claimed	Certified Copy Attached?

I/we hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)
61/593,381	02/01/2012

I/we 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 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole or First Inventor David Brown

Inventor's Signature



JULY 12, 2013
Date

Residence: Ottawa, ON, CANADA

Citizenship: Canadian

Post Office 15 Huntings End Ave.
Address: Ottawa, ON K2M 1L6
CANADA

Electronic Acknowledgement Receipt	
EFS ID:	16692834
Application Number:	13755099
International Application Number:	
Confirmation Number:	1447
Title of Invention:	VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT
First Named Inventor/Applicant Name:	David Brown
Customer Number:	23553
Filer:	Richard J. Mitchell/Carolynn Irvin
Filer Authorized By:	Richard J. Mitchell
Attorney Docket Number:	28319-US
Receipt Date:	27-AUG-2013
Filing Date:	31-JAN-2013
Time Stamp:	09:50:12
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	TL.pdf	36208 493f68c186b296b161485531f68a24caffc385b	no	1

Warnings:

Information:

2	Oath or Declaration filed	SuppDec.pdf	98197 fb3a864d56d78c6c1fac9edcf4d75145989d789d	no	2
Warnings:					
Information:					
Total Files Size (in bytes):				134405	
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		13755099
	Filing Date		2013-01-31
	First Named Inventor	BROWN, David	
	Art Unit	2656	
	Examiner Name		
	Attorney Docket Number	28319-US	

U.S. PATENTS							Remove
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.							Add
U.S. PATENT APPLICATION PUBLICATIONS							Remove
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	20080267282	A1	2008-10-30	Kalipatnapu, Rajah K V R et al.		
	2	20110187813	A1	2011-08-04	Musgrave, Peter		
	3	20070285506	A1	2007-12-13	Schneider, Roland		
	4	20110047487	A1	2011-02-24	DeWeese, Toby et al.		
	5	20110205332	A1	2011-08-25	Jeong, Hyeonkuk et al.		
If you wish to add additional U.S. Published Application citation information please click the Add button.							Add
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		13755099	
	Filing Date		2013-01-31	
	First Named Inventor	BROWN, David		
	Art Unit	2656		
	Examiner Name			
	Attorney Docket Number	28319-US		

Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ² j	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							☐

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NON-PATENT LITERATURE DOCUMENTS

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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		☐

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EXAMINER SIGNATURE

Examiner Signature		Date Considered	
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*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	13755099
	Filing Date	2013-01-31
	First Named Inventor	BROWN, David
	Art Unit	2656
	Examiner Name	
	Attorney Docket Number	28319-US

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	/rjmitchell34519/	Date (YYYY-MM-DD)	2013-08-07
Name/Print	Richard J. Mitchell	Registration Number	34,519

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
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 Acknowledgement Receipt	
EFS ID:	16520483
Application Number:	13755099
International Application Number:	
Confirmation Number:	1447
Title of Invention:	VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT
First Named Inventor/Applicant Name:	David Brown
Customer Number:	23553
Filer:	Richard J. Mitchell/Julie Dodd
Filer Authorized By:	Richard J. Mitchell
Attorney Docket Number:	28319-US
Receipt Date:	07-AUG-2013
Filing Date:	31-JAN-2013
Time Stamp:	10:20:06
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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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)	28319IDS080613.pdf	612321 3de5dd2faeff5905c87533e0e843a6c8230156c	no	4

Warnings:

Information:

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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.



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
13/755,099	01/31/2013	David Brown	28319-US

CONFIRMATION NO. 1447

23553
MARKS & CLERK
P.O. BOX 957
STATION B
OTTAWA, ON K1P 5S7
CANADA

PUBLICATION NOTICE



Title:VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT

Publication No.US-2013-0194378-A1

Publication Date:08/01/2013

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

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		13755099
	Filing Date		2013-01-31
	First Named Inventor	BROWN, David	
	Art Unit	2656	
	Examiner Name		
	Attorney Docket Number	28319-US	

U.S. PATENTS							Remove	
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.							Add	
U.S. PATENT APPLICATION PUBLICATIONS							Remove	
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		
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If you wish to add additional U.S. Published Application citation information please click the Add button.							Add	
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Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ² j	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							Add	
NON-PATENT LITERATURE DOCUMENTS							Remove	
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

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		13755099
	Filing Date		2013-01-31
	First Named Inventor	BROWN, David	
	Art Unit	2656	
	Examiner Name		
	Attorney Docket Number	28319-US	

1	"Multiview: Improving Trust in Group Video Conferencing Through Spatial Faithfulness", David Nguyen et al., Berkeley Institute of Design, University of California, ACM Conference on Human Factors in Computer Systems, 2007, Pages 1465-1474.	☐
2	"eyeView: Focus+Context Views for Large Group Video Conferences", T. Jenkin et al., Queens University, Kingston, ON, Proceedings of the ACM Conference on Human Factors in Computer Systems (CHI), 2006, Pages 1497-1500.	☐
3	"Development of Teleconferencing Methodologies With Emphasis on Virtual Space Video and Interactive Graphics", Linda B. Allardyce et al., DARPA Technical Report, Washington, D.C., DDI/TR 83-4-314.73, April 1983, Pages 1-88.	☐
4	"Virtual Video Conferencing Using 3D Model-Assisted Image-Based Rendering", Peter Eisert, Fraunhofer Institute for Telecommunications, Image Processing Department, Berlin, Germany.	☐

If you wish to add additional non-patent literature document citation information please click the Add button **Add**

EXAMINER SIGNATURE

Examiner Signature		Date Considered	
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*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	13755099
	Filing Date	2013-01-31
	First Named Inventor	BROWN, David
	Art Unit	2656
	Examiner Name	
	Attorney Docket Number	28319-US

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	/rjmitchell34519/	Date (YYYY-MM-DD)	2013-04-25
Name/Print	Richard J. Mitchell	Registration Number	34,519

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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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.
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5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Acknowledgement Receipt	
EFS ID:	15610655
Application Number:	13755099
International Application Number:	
Confirmation Number:	1447
Title of Invention:	VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT
First Named Inventor/Applicant Name:	David Brown
Customer Number:	23553
Filer:	Richard J. Mitchell/Carolynn Irvin
Filer Authorized By:	Richard J. Mitchell
Attorney Docket Number:	28319-US
Receipt Date:	25-APR-2013
Filing Date:	31-JAN-2013
Time Stamp:	13:16:59
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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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.pdf	771014 99e0ae282dca0aa8108065bf3479ba424756c248	no	4

Warnings:

Information:

A U.S. Patent Number Citation or a U.S. Publication Number Citation is required in the Information Disclosure Statement (IDS) form for autoloading of data into USPTO systems. You may remove the form to add the required data in order to correct the Informational Message if you are citing U.S. References. If you chose not to include U.S. References, the image of the form will be processed and be made available within the Image File Wrapper (IFW) system. However, no data will be extracted from this form. Any additional data such as Foreign Patent Documents or Non Patent Literature will be manually reviewed and keyed into USPTO systems.

2	Non Patent Literature	NPL1.pdf	1107789	no	10
			80adf5d3ab25ad92066873ec00371d40f8ff9356		

Warnings:

Information:

3	Non Patent Literature	NPL2.pdf	413759	no	4
			1b05bde5d317bcacbe65a827b8fe50de53055968		

Warnings:

Information:

4	Non Patent Literature	NPL3.pdf	5761441	no	98
			596834581a0857795cd2b9cfecf9834e7bc957ab		

Warnings:

Information:

5	Non Patent Literature	NPL4.pdf	847949	no	9
			47279c5dc26685f28e9c5f80cf680f85cdd75c2e		

Warnings:

Information:

Total Files Size (in bytes):			8901952
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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.

ASSIGNMENT

WHEREAS

David Brown

residing at **16 Huntings End Ave., Ottawa, ON, K2M 1L6, CANADA**

has invented improvements in **VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT** for a Declaration for United States Letters Patent has been executed by us on even date hereon and

WHEREAS, MAGOR COMMUNICATIONS CORPORATION, whose full post office address is, **350 Terry Fox Drive, Suite 300, Ottawa, ON, K2K 2W5, CANADA**, as assignee, is desirous of acquiring all right, title and interest in and to said invention and any Letters Patent that may be granted therefor.

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, I, as assignor hereby sell, assign and set over to said assignee the entire right, title and interest for the United States of America and all other countries, in and to said invention and the aforesaid application for Letters Patent, all original, divisional, continuation, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries, and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said improvements or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for themselves and their legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all divisional, continuation, reissue and other applications for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said improvements, whenever requested, to testify in any interference or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid for by said assignee.

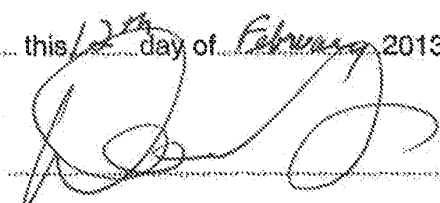
As a below named inventor, I hereby declare that:

This declaration is directed to the attached application.
The above-identified application is authorized to be made by me.

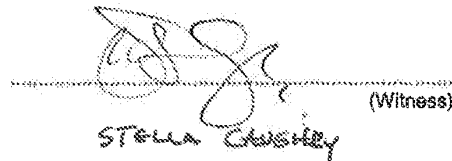
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C 1001 by fine or imprisonment of not more than five (5) years or both.

Signed at Ottawa this 12th day of February 2013



David Brown


STELLA CHISLEY

(Witness)

Electronic Patent Application Fee Transmittal				
Application Number:		13755099		
Filing Date:		31-Jan-2013		
Title of Invention:		VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT		
First Named Inventor/Applicant Name:		David Brown		
Filer:		Richard J. Mitchell/Carolynn Irvin		
Attorney Docket Number:		28319-US		
Filed as Small Entity				
Utility under 35 USC 111(a) Filing Fees				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Late Filing Fee for Oath or Declaration	2051	1	70	70
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Total in USD (\$)				70

Electronic Acknowledgement Receipt	
EFS ID:	15339077
Application Number:	13755099
International Application Number:	
Confirmation Number:	1447
Title of Invention:	VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT
First Named Inventor/Applicant Name:	David Brown
Customer Number:	23553
Filer:	Richard J. Mitchell/Carolynn Irvin
Filer Authorized By:	Richard J. Mitchell
Attorney Docket Number:	28319-US
Receipt Date:	25-MAR-2013
Filing Date:	31-JAN-2013
Time Stamp:	09:47:06
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$70
RAM confirmation Number	8016
Deposit Account	131717
Authorized User	
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. Section 1.16 (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)	

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	Oath or Declaration filed	DecAssig.pdf	103921	no	2
			8f2efb805da09c8a2374675d739f4e9c9897ec00		

Warnings:

Information:

2	Fee Worksheet (SB06)	fee-info.pdf	30332	no	2
			93d0c28c8879f3764ecb4a64df3eeab54b332ca		

Warnings:

Information:

Total Files Size (in bytes):	134253
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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
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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
13/755,099	01/31/2013	2656	753	28319-US	25	3

CONFIRMATION NO. 1447

23553
MARKS & CLERK
P.O. BOX 957
STATION B
OTTAWA, ON K1P 5S7
CANADA

FILING RECEIPT



Date Mailed: 02/28/2013

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**

Inventor(s)

David Brown, Nepean, CANADA;

Applicant(s)

MAGOR COMMUNICATIONS CORPORATION, Ottawa, CANADA

Assignment For Published Patent Application

MAGOR COMMUNICATIONS CORPORATION, Ottawa, CANADA

Power of Attorney: The patent practitioners associated with Customer Number 23553

Domestic Priority data as claimed by applicant

This appln claims benefit of 61/593,381 02/01/2012

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.) - None.

Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access - A proper **Authorization to Permit Access to Application by Participating Offices** (PTO/SB/39 or its equivalent) has been received by the USPTO.

If Required, Foreign Filing License Granted: 02/21/2013

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 13/755,099**

Projected Publication Date: 08/01/2013

Non-Publication Request: No

Early Publication Request: No

page 1 of 3

**** SMALL ENTITY ****

Title

VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT

Preliminary Class

348

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).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where

the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

SelectUSA

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 U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop technology, manufacture products, deliver services, and grow your business, visit <http://www.SelectUSA.gov> or call +1-202-482-6800.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875						Application or Docket Number 13/755,099	
APPLICATION AS FILED - PART I							
(Column 1)		(Column 2)		SMALL ENTITY		OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE(\$)	FEE(\$)		RATE(\$)	FEE(\$)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	98		N/A	
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A	310		N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	125		N/A	
TOTAL CLAIMS (37 CFR 1.16(j))	25	minus 20 = 5	x 31	= 155	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	3	minus 3 = *	x 125	= 0.00			
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			0.00			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				0.00			
			TOTAL	688		TOTAL	
* If the difference in column 1 is less than zero, enter "0" in column 2.							
APPLICATION AS AMENDED - PART II							
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY	
AMENDMENT A		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	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	
(Column 1)		(Column 2)		(Column 3)		OTHER THAN SMALL ENTITY	
AMENDMENT B		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	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 found in the appropriate box in column 1.							



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
13/755,099	01/31/2013	David Brown	28319-US

CONFIRMATION NO. 1447

23553
MARKS & CLERK
P.O. BOX 957
STATION B
OTTAWA, ON K1P 5S7
CANADA

NOTICE



Date Mailed: 02/28/2013

INFORMATIONAL NOTICE TO APPLICANT

Applicant is notified that the above-identified application contains the deficiencies noted below. No period for reply is set forth in this notice for correction of these deficiencies. However, if a deficiency relates to the inventor's oath or declaration, the applicant must file an oath or declaration in compliance with 37 CFR 1.63, or a substitute statement in compliance with 37 CFR 1.64, executed by or with respect to each actual inventor no later than the expiration of the time period set in the "Notice of Allowability" to avoid abandonment. See 37 CFR 1.53(f).

The item(s) indicated below are also required and should be submitted with any reply to this notice to avoid further processing delays.

- A properly executed inventor's oath or declaration has not been received for the following inventor(s):
All
Applicant may submit the inventor's oath or declaration at any time before the Notice of Allowance and Fee(s) Due, PTOL-85, is mailed.



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
13/755,099	01/31/2013	David Brown	28319-US

CONFIRMATION NO. 1447

POA ACCEPTANCE LETTER



23553
MARKS & CLERK
P.O. BOX 957
STATION B
OTTAWA, ON K1P 5S7
CANADA

Date Mailed: 02/28/2013

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 02/22/2013.

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.

/anguyen/

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

Electronic Acknowledgement Receipt

EFS ID:	14839648
Application Number:	13755099
International Application Number:	
Confirmation Number:	1447
Adjustment date: 02/25/2013 ABALINAN 01/31/2013 INTEFSW 00012800 131717 13755099 04 FC:2202 186.00 CR 02/25/2013 ABALINAN 00000015 131717 13755099 01 FC:2202 155.00 DA Title of Invention:	VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT
First Named Inventor/Applicant Name:	David Brown
Customer Number:	23553
Filer:	Richard J. Mitchell/Carolynn Irvin
Filer Authorized By:	Richard J. Mitchell
Attorney Docket Number:	28319-US
Receipt Date:	31-JAN-2013
Filing Date:	
Time Stamp:	11:40:09
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$719
RAM confirmation Number	12800
Deposit Account	131717
Authorized User	
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. Section 1.16 (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)	

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.

POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

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

I hereby appoint:



Practitioners associated with Customer Number:

23553

OR



Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number

Name	Registration Number

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

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



The address associated with Customer Number:

OR

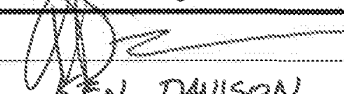
☐ Firm or Individual Name			
Address			
City	State	Zip	
Country			
Telephone	Email		

Assignee Name and Address: Mager Communications Corporation
350 Terry Fox Drive
Suite 300
Ottawa, Ontario, K2K 2W5 CANADA

A copy of this form, together with a statement under 37 CFR 3.73(c) (Form PTO/AIA/98 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(c) may be completed by one of The practitioners appointed in this form, and must identify the application in which this Power of Attorney is to be filed.

SIGNATURE of Assignee of Record

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

Signature		Date	February 12, 2013
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Electronic Acknowledgement Receipt	
EFS ID:	15024008
Application Number:	13755099
International Application Number:	
Confirmation Number:	1447
Title of Invention:	VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT
First Named Inventor/Applicant Name:	David Brown
Customer Number:	23553
Filer:	Richard J. Mitchell/Carolynn Irvin
Filer Authorized By:	Richard J. Mitchell
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Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	PofA.pdf	117829 a706fe190ec687af0c06ca9470f56db52267738d	no	1

Warnings:

Information:

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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

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Electronic Acknowledgement Receipt

EFS ID:	14839648
Application Number:	13755099
International Application Number:	
Confirmation Number:	1447
Title of Invention:	VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT
02/20/2013 UUAN11 00000036 131717 13755099 01 FC:2051 65.00 DA	
First Named Inventor/Applicant Name:	David Brown
Customer Number:	23553
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Payment Type	Deposit Account
Payment was successfully received in RAM	\$719
RAM confirmation Number	12800
Deposit Account	131717
Authorized User	

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VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT

Cross Reference to Related Application

This application claims the benefit under 35 USC 119(e) of United States provisional application no. 61/593,381, the contents of which are herein incorporated by reference.

Field of the Invention

This invention relates to the field of videoconferencing, and in particular to a videoconferencing system that provides a virtual physical context for a multiparty video call, and which in one aspect is applicable to mixed topology conferencing networks.

Background of the Invention

Video conferencing permits people to meet without traveling. Unfortunately the video conferencing experience can be unsatisfactory when compared to a real meeting room with the same people. In a multiparty video call there are multiple video images (usually at least one from each end-point). If there are more images than video monitors, the images will be rendered at a small scale or viewed one at a time by some multiplexing technique. It is often difficult to view individual images at full scale and quickly sort between multiple images.

It is also often difficult to tell what the people at the remote videoconference site are looking at. If multiple sites are connected in a single call (a multiparty video call) it is not clear who is talking to whom.

Multi-party videoconferences are typically hosted by a Multiparty Control Unit (MCU) also known as a Multipoint Conference Unit. The MCU consolidates all the video feeds from the end points and presents appropriate video images to each of the end points of all the video camera and collaboration material video feeds in the conference.

MCUs typically permit limited independent control of what images are promoted to full-scale size. Common techniques for full-scale selection are to permit 'paging' between individual images or to enable automatic promotion of single images or image-combinations using audio or manual cues.

MCU's do not have a sense of physical location or proximity of materials in the conference. No physical layout information is preserved or inferred in presentation. Fig 3a illustrates a typical MCU screen layouts. In the simplest case the screen 31 is simply divided into equal sized panes 32 with no weight given to any remote endpoint video.

Alternatively, as shown in Fig 3b Video A of the current talker at is rendered in the largest "pane" 33, other participant Videos B, C and D are rendered in the smaller panes 34. A moment later a participant at location B picks up the conversation and the MCU switches the panes so that Video B is rendered in large pane 33 and Video A is rendered in a smaller pane 34. This is shown in Fig 3c. Typical MCUs offer a number of layout designs with different numbers of panes but all are characterized by lack of an overall consistent positioning of video panes relative to one another. Video pane labels to some degree help participants follow the conversation especially if video source switching is also employed at some distant endpoints. One pane, often the smallest, displays the local video as other endpoints will see it.

Radvision SCOPIA Elite 5000 MCU is typical of current technology. By default all endpoints receive the same video stream. The layout of this stream is setup by a moderator. Users at any endpoint may setup a "personal conference layout" but doing this is a multistep procedure involving a number of dialog boxes.

The term "Telepresence" is used to refer to a videoconference system having certain characteristics addressing the general problem of making a videoconference more like a face-to-face meeting. High definition video renders participants life-size on large screens, arranged typically in a row and often borderless, wideband stereo or multichannel sound are used to create a lifelike impression of distant parties with the objective of giving the illusion that they are actually sitting across the table. Various methods are used to address the problem which arises when there are more video streams to show than there are monitors to show them.

Cisco TelePresence Multipoint Switch (CTMS) is a typical MCU for use in a telepresence environment. In order to satisfy conflicting requirements of displaying all meeting participants life-size on a limited number of monitors voice activated switching is used. Switching may be at a site level, i.e. the site(s) with the current and most resent

talkers are displayed. In the case of a site(s) with more than one or two participants multiple cameras may be “segment” switched making the current or most recent talker visible at distant endpoints. As is typical in such system the local user interface that is used to control layout, e.g. place a “presentation-in-picture”, or alternatively on a separate monitor, is controlled via dialog boxes on a control device, e.g. laptop PC. The essence of the problem with multiparty conferences is that video cameras render a three-dimensional world on a two-dimensional video monitor. There has been some research in rendering spatially appropriate video images; see references 1 and 2 below.

In a multipoint conference employing an MCU endpoints are interconnected in a star, or multi-star, topology. In an alternative configuration, known as mesh configuration and illustrated in Fig 2, each endpoint is connected directly to each other endpoint in the conference. In such an arrangement each endpoint has complete freedom to present video and other collaboration material uniquely and independently of the way it is presented at other endpoints.

In the past mesh endpoints have been built on standard GUI frameworks. This allows users extreme flexibility in that they can move, shape, minimize, maximize, bring forward, send back, cascade, etc. windows each representing video or collaboration material from other endpoints in a call. However, all this flexibility is both tedious and distracting in the context of a meeting.

Various approaches have been considered in the prior art: - See, for example, “Multiview: improving trust in group video conferencing through spatial faithfulness”, Nguyen, D.T., Canny, J.; ACM conference on Human Factors in Computer Systems, 2007, pp. 1465-1474; Berkeley Institute of Design; and “eyeView: focus+context views for large group video conferences”; Jenkin, T. , McGeachie, J., Fono, D., Vertegaal; Proceedings of the ACM Conference on Human Factors in Computer Systems (CHI), 2006 (extended abstracts), pp. 1497-1500; Human Media Lab of Queens' University Canada.

The Heinrich Hertz Institute of the Fraunhofer Institute for Telecommunications is also working on 3D video conferencing technologies. A few companies are using emulations of 3D environments like Tixeosoft.

DARPA Technical Report "DDI/IT 83-4-314.73", Linda B. Allardyce and L. Scott Randall, April 1983.

The DARPA report describes how "realism in conferee relationship is accomplished in two ways. First, at each station, the four conferees (one real and three surrogates) must maintain the same arrangement; that is A is always on B's left, B is always on C's left, and D is always on A's left. ... The second key ... Instead of a single camera transmitting the same image of the real conferee to all other locations, there is an individual camera for each surrogate transmitting the image of the present conferee to the remote station from the surrogate's perspective..."

Summary of the Invention

In one aspect the invention provides an endpoint for a teleconferencing system wherein multiple parties participate in a teleconference from different locations, comprising one or more display screens at a conference location, and which is configured such that a filmstrip containing simultaneous images or icons representing the participants is displayed on said one or more display screens in a spatial relationship that represents their real-world or virtual-world spatial relationships. The images or icons may be in the form of frames containing reduced-size video feeds, which can be promoted to full size by clicking.

Embodiments of the invention thus provide a virtual physical context for a multiparty video call so that there is a sense of position of people and things with respect to each other. This resolves the ambiguity of what or who is being looked at or spoken to. An embodiment of the invention provides a video navigation system that illustrates the positions of people and things in the virtual conference room and facilitates selection of what to look at when there are more images than available video monitors. Even when a single image (amongst several) is enlarged, the remaining scaled-down images are still active and in view.

In the case where multiple live video feeds are presented to one or more video monitors, but where there are more images than monitors embodiments of the invention permit easy selection and promotion to full scale of single images. Promotion of two images to $\frac{1}{2}$ scale and three images to $\frac{1}{3}$ scale etc. is permitted. The user interface deliberately is

modeled on how common computer window-management systems behave so that users do not have to learn new keystrokes or mouse-actions.

In one embodiment one or more rows of images at 1/6 to 1/9 full scale are *always* present on the bottom of the screen. By single clicking or double-clicking the left-computer mouse- button the user can promote one or more images to full scale. If the image is a live video feed then the image is rendered at full scale with the bottom of the image partially occluded by the filmstrip images at the bottom of the screen. If the image is of a computer application or desktop then the image is reduced in size so that no part of it is occluded.

Standard user methods including shift-click and control-click are used to select multiple contiguous images or to select/deselect single images are implemented. The video mapping technique in accordance with an embodiment of the invention allows the user to see all active videos simultaneously while preserving natural gaze angle and position information for a videoconference of more than two end-points.

This invention permits rapid promotion to full scale of one or more live video feeds while keeping all active feeds in view. In comparison to other systems typically employing an MCU or special purpose hardware, as many Telepresence systems do, the invention works with common hardware and standard operating systems.

In one embodiment the invention facilitates endpoints interconnected in a mesh configuration, eliminating the capital and management cost of an MCU, although does not preclude star configuration.

Another problem arises in mixed topology networks where a number of endpoints are connected in a mesh connection, and at least one endpoint is connected to a mesh-connected endpoint with a non-mesh connection. In this case, it would be desirable to permit the non-mesh connected endpoint to enjoy the same features as the mesh-connected endpoints.

Thus, according to another aspect of the invention there is provided a teleconferencing system comprising a plurality of endpoints, at least some of which are connected in a mesh configuration and at least one of which is connected in a non-mesh configuration to

a selected one of the mesh-connected endpoints, and which are configured such that a film strip with frames containing reduced-size video feeds from the conference participants is displayed at the mesh endpoints; a proxy at the selected mesh-connected endpoint for the non-mesh connected endpoint and connected to each of the mesh-connected endpoints to receive video feeds from the mesh-connected endpoints for the non-mesh connected endpoint; a server associated with the proxy for serving the film strip with frames containing reduced-size video feeds from the mesh-connected conference participants to the non-mesh connected endpoint; and a control connection permitting a user located at the non-mesh connected endpoint to select a video feed on the film strip for promotion to full size and to initiate transfer of the full size video feed to the non-mesh connected endpoint.

Brief Description of the Drawings

The invention will now be described in more detail, by way of example only, with reference to the accompanying drawings, in which:-

Figure 1 shows a typical mesh connected videoconference end point;

Figure 2 shows a typical mesh connected four-party call;

Figures 3a to 3c show typical prior art screen layouts;

Figures 4a and 4b show typical screen layouts in accordance with embodiments of the invention;

Figures 4c and 4d show filmstrips;

Figure 4e shows a round table concept;

Figures 5a and 5b show screen layouts using two monitors;

Figures 6a to 6c show different screen layouts for user at location D;

Figures 7a and 7b show different screen layouts with promoted collaboration;

Figure 8 depicts a typical prior art mixed topology conference;

Figure 9 depicts a mixed topology conference with a star server; and

Figure 10 depicts a non-mesh endpoint proxy.

Detailed Description of Embodiments of the Invention

The use of a filmstrip is a feature of the user interface of a video conferencing endpoint in accordance with embodiments of the invention. The filmstrip consists of a frame strip containing reduced size video feeds from the various participants. Its purpose is to allow users to see video and collaboration material from all conferenced parties and to determine which particular video streams or collaboration materials will be “promoted”, that is to say displayed at a larger scale, and how promotions will be initially placed on the screen(s) of the endpoint.

Fig 1 depicts a typical endpoint 10. It comprises collection of devices managed by a common Call Control software 19 having a single network address (e.g. IP address or URL) used for call set-up. Software implementing the invention is embodied in Display Controller 11. Blocks in the figure are functional representations and do not imply any particular hardware integration. Call Control 19 and Display Controller 11 software could run in with other software in a shared computer or in separate computers.

Conference participants 14 sit before video cameras 15 and in front of monitors 12. The monitors are controlled by display controller 11 and receive multiple video streams and collaboration data 17 from all other endpoints participating in a given conference.

Preferably other endpoints also employ the invention. Participants may have collaboration material that they wish to share on a laptop computer 16 or video recording device (not shown) etc.

The endpoints in a multipoint call may be interconnected in a mesh configuration as illustrated by the example in Fig 2. The figure shows four interconnected endpoints. In a mesh connection media streams and data from all devices at each endpoint, e.g. 21, are streamed independently to and from all other endpoints, e.g. 22, 23 and 24, in the conference via the Network 18 connections 26, 27 and 28 respectively. If, as illustrated in Fig 1, one endpoint 21 has two video cameras both resulting video streams 13 will be streamed in each of the network connections 26, 27 and 28. It would be understood by someone skilled in the art that the invention could be implement in star connected systems using an MCU(s), possibly as a feature of the MCU, and that multiple camera outputs could be combined in some way before being transmitted to the network.

The invention is most easily understood in the case of an endpoint having a single display screen intended to show video or collaboration material.

In one embodiment the filmstrip is located near the lower edge of the screen and is a single row of thumbnails of all videos or collaborations (i.e. document, presentation etc.) from all endpoints in the conference. Showing all sources from all distant end point(s) all of the time, even if they have also been promoted to a larger size, is a key differentiator from prior art endpoints (Fig 3 described above) in which promotion means that a smaller video is removed on promotion.

In the preferred embodiment thumbnails are added to the filmstrip in left to right order as they are added to the call. For example Fig 4a shows the filmstrip 42 after an endpoint designated D has set up a call with endpoint A and then added endpoints B and C. This ordering is arbitrarily chosen as a method for establishing a virtual round table.

The Round-Table concept is illustrated in Fig 4e. When the filmstrip or promoted videos are displayed at any given location, they are displayed in a manner reflecting the view from a given endpoint as if all participating endpoints were positioned at a round table 492. For example from the perspective of Endpoint D 494 at the virtual table end point A is to the left, B is in the centre and C is to the right.

This becomes important when another endpoint in the conference also embodies the invention; it is preferred that all endpoints in the conference employ the invention. In another aspect of the invention, "round-table" order will be preserved across the conference.

That is to say that filmstrip at location C, for example, will be displayed as illustrated in Fig 4c reflecting the view from location C 496 at the same virtual round table 492.

Similarly at locations A and B order will be BCDA and CDAB respectively. Note that in this embodiment of the round-table the local view is always at the right end of the filmstrip. Other rules for establishing and presenting round table order are possible and depend on equipment configuration rules. What is important is that all endpoints using the invention in a given call follow the same rules to create the same endpoint ordering around the virtual table 492.

It is preferred that the thumbnails in the filmstrip be displayed in a single row the same height, each $1/6^{\text{th}}$ to $1/9^{\text{th}}$ the screen height.

Referring to Fig 4a, in this instance Video B 41 is promoted to fill the full screen 11. According to the invention Thumbnail Video B 44 also appears in the filmstrip. Note that element 41, because it is a video, may use the screen space behind the filmstrip, so the filmstrip can be thought of as a picture-in-picture.

A characteristic of the filmstrip GUI is that common actions like promotion, whether to full screen or shared screen, and demotion are achieved by using well-known GUI direct action methods. A "GUI direct action" means a single user-action. Examples of single user-actions are: single, double, triple click of the right, left, or middle button associated with a mouse or other pointing device while, optionally, the user holds down one of the Shift, Control or other key(s). It does not mean: selecting from a pop-up menu often associated with right click; use of a dialog box; drop down menu. It also does not mean action, direct or otherwise on a device other than the one display, or collection of displays, displaying the filmstrip as well as promotions.

For example, in the preferred embodiment if Video A is promoted, i.e. is occupying the entire screen, then a right-click on Video B thumbnail 44 will promote Video B, swapping it with promoted Video A, the result being as illustrated in Fig 4a. If now a user now holds the Control key when the thumbnail Video A 45 is right-clicked then the both video A and Video B will be displayed in a predetermined tiled arrangement on the screen as shown in Fig 4b. Note that the round-table order in the filmstrip is reflected in the way promoted videos are placed in the tile structure. Video A was added to the left of Video B because it is to the left in the filmstrip.

According to well-known practices the user may now adjust the position and size of promoted videos. In the preferred embodiment such user adjustments will be saved and used instead of the predetermined tiled arrangement.

Special limitations apply to the way in which users may adjust the filmstrip. The filmstrip is always the "top" window (i.e. always completely visible on the screen barring operating system exceptions). In the preferred embodiment the only user action affecting the

filmstrip's appearance is the user ability to move its position on the screen using any well-known GUI method.

A feature of this aspect of the invention is that when a thumbnail is promoted a second instance of the video stream, or collaboration, is created and displayed at a larger scale. The video displayed in the thumbnail remains active being a miniature version of the promoted video (or Collab).

By default the filmstrip is displayed centrally near the bottom of the screen. In an alternative embodiment of the invention provision is made for a centrally mounted video camera, which partially obscures the screen. The filmstrip will be displayed either side of a pre-configured keep-out zone 48 illustrated in Fig 4d.

It is preferred that special limitations are applied to the default promotion of Collaboration items that are different from those described above for Video items.

For example in the conference illustrated in Fig 4, a participant at location A wishes to make a presentation and using known methods adds his presentation to the call. This action has the immediate effect at all endpoints in the conference employing the invention of adding a thumbnail to the filmstrip at respective endpoints, including endpoint A. According to a predetermined rule (which may vary depending on room configurations and is based on the assumption all rooms are similarly configured) the Collab thumbnail is positioned immediately to the right of the corresponding Video thumbnail extending the round-table concept. This is illustrated in Fig 7a as it would appear in the filmstrip at location D. Collab A 71 is to the right of associated Video A 73.

In one variant of the invention any newly added item will immediately be promoted as if the user had right-clicked the newly added thumbnail, 71 in this case. Either by this default means or when the user clicks the thumbnail the Collab is promoted, but it will not be allowed to use the entire screen. The promoted Collab 72 will be constrained not only by other promoted items (not present in this example) but also by the filmstrip. Had any of the promoted videos remained on the screen with Collab A then the promoted Collab would have the same position relative to the promoted Video(s) as its thumbnail

does relative to the video(s) thumbnails. Fig 7b illustrates a possible result when Collab A 72 is displayed at the same time as Video A 74 and Video C 75.

In general it is preferred that Videos and Collabs are treated as separate display object classes allowing for different behavioral rules for the Video Class and the Collab Class. For example, in addition to not being obscured by the filmstrip, when promoting a Collab Class using a right-click it will not swap with a Video Class but add to any promoted Video Class objects, and vice versa.

In the event that the invention is embodied in more than one endpoint all user actions on the filmstrip are local to the user's endpoint.

The filmstrip is useful not only in multipoint calls as described so far but also in point to point calls where one or both locations may have more than one camera, video feed, document, white board, presentation etc to make available to the other party.

The invention so far has been described as it would apply to an endpoint with a single screen. It may be adapted to the case where the endpoint has more than one screen available for conference content presentation.

Referring to Fig 5a the same 4 party call will be used to illustrate the adaptation to two screens. The filmstrip as described in the single screen case is arbitrarily split between multiple screens by default. In the two screen example left screen 502 filmstrip 522 contains thumbnails for locations A and B and right screen 504 filmstrip 524 contains thumbnails for the remaining location C as well as local video D.

It is preferred that Round-Table order is preserved so that the aggregated filmstrips on a two screen endpoint at location C in the same exemplary four party conference would look as illustrated in Fig 5b. Note that Round-Table order is also preserved in the promoted Videos too by virtue of the location of the corresponding thumbnails. At location D Video B 512 is displayed on the left screen 502 and Video D 514 (video local to D) is displayed on the right screen 504 see Fig 5a. At location C Video B 518 is displayed on the right screen 518 and Video D 516 is displayed on the left screen 506 see Fig 5b.

It is preferred that by default a Video is promoted to the same screen its corresponding thumbnail is located. According to the invention users can drag portions of the filmstrip from one screen to another in order to influence the screen to which promotion will occur. It is preferred that such adjustment of the filmstrip be constrained by the Round-Table rules as illustrated by the following example.

Fig 6a illustrates a typical two-screen layout. The example is a four-endpoint conference similar to that used above except that endpoint D now has two screens 602 and 604, but the conference composition and state is the same as illustrated in Fig 7a for a single screen at location D. The filmstrip is, according to the invention, arbitrarily split between the two screens: filmstrip 606 on the left and filmstrip 608 on the right. Because an individual at location A just added Collab material to the conference it is by default preference displayed promoted 603 on location D left screen 602. This is because this is where thumbnail Collab A 610 appears in the filmstrip having been added according to the preferred Round-Table order.

It is now assumed that a user at location D wishes to drag the Collab A Thumbnail 610 to the right screen 604 in order to influence this and future presentations of this conference. The user presses the mouse on the thumbnail and typical Windows icon 612 indicates to the user that the object under the icon, in this case the thumbnail 610, can now be dragged with the mouse until it is released.

Fig 6b illustrates an intermediate point in the drag-drop process. Note that in order to preserve the preferred Round Table order Video B Thumbnail 614 is “pushed” ahead of the target thumbnail 610 by icon 612.

Assuming the user drags the icon 612 as far as the right screen 604 before releasing the mouse button, following typical GUI behavior, the drag is deemed complete and the dragged object is placed in the destination screen constrained, in this case, by novel filmstrip rules. There is only one preferred filmstrip configuration as shown in Fig 6c item 616. Thumbnail Video A 618 remains as the only thumbnail on the left screen 602.

A number of details shown in Fig 6 are a matter of detail design and not necessary for the invention. In Fig 6a Collab A 603 was promoted as is the preference for a newly added item. However the promotion is not shown in Fig 6b and 6d, whether it stays, moves to

the right screen, or is no longer promoted is a matter of design or user preference. The filmstrip 616 is shown centered, Thumbnail 618 remains where it was, and again centering, or lack of, is a matter of design or user preference. Both filmstrips 616 and 618 have the same scale as before the drag, this may or may not be the case depending not only on design or user preference but also the number of parties and sources of video and Collab material.

In one embodiment when a second (or subsequent) thumbnail is right-clicked on a screen already occupied by a promoted video (or Collab) and another screen has free space (which could be tiled space) then the second video is promoted to the alternate screen.

The following detailed description applies to a solution where multiple video images are displayed on a single video monitor. A separate description for a solution for multiple monitors follows.

In order to implement the filmstrip in a timely fashion, the existing video and desktop windows are used. Each frame in the filmstrip is a separate top-level window, which is the same window that will be re-sized and displayed in the main view region when selected. Preferably, the filmstrip should only be visible when two or more videos or computer-desktops (collabs) are available to be displayed on a single panel (this includes local video / collab as well)

Each video and desktop, when in the filmstrip representation, does not have title bars or borders to move or re-size windows. This allows the integrity of the filmstrip to be maintained, that is, videos and desktop representations that are in the filmstrip remain in the filmstrip. Other forms of interaction with the videos and desktops are removed: mouse movements and clicks on a desktop would have no effect, the zoom, crop, and switch camera buttons on the viewers are removed, clicking and dragging on the video viewer does not cause panning

When the filmstrip does not fill the entire horizontal bottom band, a handle can be added at the left end of the filmstrip that users to click and drag to move the film strip if they desired. A space can be left in the filmstrip behind the position where the camera is expected to be, so that the entire filmstrip is visible.

The windows in the filmstrip remain always on top. The filmstrip would appear almost as picture-in-picture on top of what is being viewed. That is, if a video is full screen, it will be partially covered by the filmstrip. Desktops, however, would not be placed beneath the filmstrip, by default, and the appropriate scaling would be automatically applied to ensure this is the case.

Items in the filmstrip would appear in their round-table order: Videos appear left-to-right in the order they would appear in a clock-wise direction if you walked around the round table, starting at the position to your left. Desktops would appear to the right of the person who owns them. The local video and any local desktops would appear on the far right. The initial height of videos in the filmstrip would be 1/6 of the screen height. If necessary, however, items in the filmstrip would shrink to accommodate new resources. No scroll bars would appear. Initially, videos being displayed on screen would be represented by pictograms in the filmstrip, until we are capable of rendering two views of the same video on the same screen at the same time.

Interactions

In general, N videos or desktops could be displayed at once, and there is no need to initially set a limit. The videos should be displayed left to right in a single row, rather than stacking them (i.e. emulate Ardbeg, not Ardmore). Clicking, Ctrl-Clicking, and Shift-Clicking are mechanisms for choosing which videos and collabs are displayed.

The familiar semantics of clicking, shift-clicking, and ctrl-clicking for selections are preserved. Videos and collabs are considered different classes of windows. Clicking a collab will never displace a video. Clicking a video will never displace a collab.

Clicking a video thumbnail will cause it to replace the existing videos. Clicking a collab thumbnail will cause it to replace the existing collabs. The simple case is, only one video is displayed, and clicking a thumbnail swaps them out. The complex case is when two videos are displayed. All of the currently displayed videos are returned to the film-strip, and the one that was clicked is displayed.

Clicking a pictogram for a video or desktop that is already displayed has the same effect as clicking it if it had not been displayed. If it was not maximized, it becomes maximized.

If it was not the only video being displayed, it becomes so after being clicked - all other displayed videos are returned to the filmstrip. Ditto for collab. If it was the only video being displayed, and was maximized, it has no effect.

When we move to multi-screens, then clicking on a video or desktop might first choose a screen, and affect only that screen, and not the resources displayed on other screens. Ctrl-Clicking a thumb-nail will alter the number of videos or desktops that are displayed.

Ctrl-Click on a video or desktop that is not currently displayed causes it to be displayed, but does not remove any of the videos or desktops currently being displayed. Ctrl-Click on a pictogram for a video or desktop that is currently displayed causes it to be returned to the filmstrip, and not replaced with any others. If this was the only video or desktop being displayed, then the result will be no video or no desktop is displayed

Shift-Clicking is like Ctrl-Clicking, but selects a contiguous region of the videos and desktops to be displayed. I

It is also desirable to drag and drop videos and collabs from the film-strip to utilize dead space, if desired, and to replace the contents of a selected window, if desired. This may have the effect of re-ordering the round-table (but that will not likely apply to single-screen systems).

Windows in the filmstrip cannot be moved around independently. The filmstrip should seem as a single window with a handle at the left that can be used to drag it left or right. Windows outside the filmstrip can be moved around at will, as in the past, because they have a title bar and borders. If only one window or desktop is displayed, clicking on another window or desktop will cause a swap of the media, which may reshape for aspect ratio, but will otherwise not cause it to move or resize

Ctrl-Clicking on another window or desktop, or if there are multiple windows displayed, normal clicking, will cause a complete re-layout, moving all resources back to the single row in round table positioning. Minimizing a video or desktop should return that video or desktop to the live view in the filmstrip. That is, it has the same effect as ctrl-clicking on the filmstrip pictogram representing it.

Window Behavior / Window Manager Considerations

- Windows in the film-strip:
 - No entry in task bar
 - No title bar
 - No border
 - No mouse/keyboard interactivity
 - Always on top
- Windows displayed in content area
 - Have entry in task bar until no longer displayed
 - When resource is not displayed in content area, no entry in task bar for that resource. Only way to access that window is through the filmstrip.
- Have title bar
- Have border
- Normal mouse/keyboard interactivity
- Whole Film-strip
 - No entry in task bar
 - No title bar
 - No border
 - Always on top
 - Special drag handle to move it within confined space at bottom of screen

Resource Selection Model

Automatic Selection of Resources

While the filmstrip is intended to be primarily user driven, there are a few times when it makes sense, and is in fact essential to the user experience, for the HD Controller to automatically select resources from the filmstrip to be displayed. Specifically:

- When the user specifically drags a local resource to the wall, it is implied that they want to view that resource immediately, so it should be added to the selection.
- When the user enters into a videoconference with a remote party, the remote video should be considered more important than the local video, and should be displayed, replacing the local video, if present.
- Similarly, when a remote user shares a desktop, this signifies a transition from a videoconference to a collaboration session, and thus the remote desktop is the most important resource, and should be displayed, replacing the local desktop, if present.
- Generally, if there are resources shared to the local wall, it can be assumed that the user wishes to view at least one of them. Therefore, if ending a resource share results in no resources being selected, where before, there were resources selected, and there are yet resources shared, we must choose one of the remaining resources to share.

This leads to the following rules:

1. The appearance of a new local resource or set of new local resources, which is not accompanied by new remote resources, results in those new local resources becoming selected. If they are accompanied by new remote resources, it is assumed they have been shared automatically by the session controller in response to receiving a remote share from a remote user, and the local resources are then not automatically selected.
2. The appearance of a new remote media type (either remote video or remote desktop) signifies a transition to a new mode of operations (where we consider three modes: local workstation, video conferencing, and remote collaborating). Thus, the new resource(s) are selected, and all local resources of the same time are deselected.
3. The ending of all the remaining selected resource shares results in searching for the most appropriate remaining resource share, and selecting it. We prefer remote videos, followed by remote desktops, then local desktops, and finally, the local video.

Manual Selection of Resources

There are certain actions that we expect will be common, and we need a selection model that makes these actions trivial. These actions are:

- Selecting a single resource to be displayed at any given time.
- Selecting a single video and a single desktop to be displayed at any given time.
- Changing the speaker displayed without changing the desktop displayed (and vice versa).
- Selecting and deselecting one (or a small number of) other resource(s).

This has given rise to the following behavior:

1. Clicking a video causes it to be selected/displayed, replacing any other video (or videos) currently selected/displayed. Similarly, clicking a desktop causes it to be selected/displayed, replacing any other desktop (or desktops) currently selected/displayed. In this way, we can select a single video and a single desktop to be displayed at any given time. Note that clicking a desktop doesn't replace the video(s), if any, and clicking a video doesn't replace the desktop(s), if any. In this way, we can easily change the speaker displayed without changing the desktop displayed, and vice versa.
2. Clicking on a video that is already the single video being selected/displayed causes it to become the only resource (video or desktop) being selected/displayed at that time. Similarly, clicking on a desktop that is already the single desktop being selected/displayed causes it to become the only resource (video or desktop) being displayed at that time. In this way, we can select a single resource to be displayed at any given time, while still being able to preserve the previously described behavior.
3. Ctrl+Clicking on any unselected/undisplayed resource adds it to the selection to be displayed without displacing any other selected/displayed resources. Ctrl+Clicking on any selected/displayed resource removes it from the selection to be displayed without affecting any other selected/displayed resources. In this way, we can easily select extra resources to be displayed beyond the single video and desktop we can cause to be

displayed with the previously described behavior. We refer to this behavior as toggle selection.

4. We want the users to be otherwise able to manipulate windows in the ways they always have, which includes minimizing a window they do not wish to see at present. However, we don't want the videos to be displayed in the task bar, since they are instead displayed in the filmstrip. Further, we expect the filmstrip to accurately reflect what is being displayed. Therefore, if a window is minimized, it is deselected.

Bulk Selection of Resources

While not likely a common action, bulk selection complements the simple selection and toggle selection actions. Specifically, it is a behavior that users are used to in other aspects of operating a desktop computer. Where a normal click is simple selection, and a ctrl+click is toggle selection, a shift+click is generally a bulk selection.

Essentially, a previously selected item is designated the "leader", then a shift+click on another item results in selecting that item, the leader, and all items in between, deselecting all others, resulting in a contiguous selected region. If there is no previously selected item to be designated the "leader", then the leader becomes the shift+clicked item, resulting in a single item selection. In our case, the "items" are video and desktop resources.

For bulk selection, we ignore the distinction between video and desktop resources that we adhere to in simple selection, because not to do so would result in a discontinuous selection region, which is contrary to the model most users are familiar with.

One behavior of bulk selection that is not well defined or uniform on other desktop platforms is the selection of the "leader". Our rules are simple. The most recent element to be added to the selection through any means except a bulk selection is the leader. However, we only keep memory of the current leader, and not previous leaders. Hence, if the current leader is removed from the selection in any way, we don't know the most recent element to be added to the selection. We instead choose the left-most selected item. If the selection is empty, then there is no selection leader.

This results in a simple implementation of bulk selection that is intuitive to the user.

Geometry Preservation

We want to be sure to provide the best layout initially, for the given set of selected resources, and then we leave it up to the user to move or resize windows as desired. Once the user has made modifications, they've given us a hint about their preferences, and we want to take them into account when we perform later layouts. Especially since the user will be quite annoyed if they have to re-modify windows in the same way each time we do a new layout. Therefore, we want to do some amount of geometry preservation to ensure that once people start making modifications, we respect those modifications.

One solution is to use a longest common subsequence diff algorithm to match new windows to old windows, and find out which new windows don't have a corresponding old window to match, etc. The rules would then be:

- Swap: Keep geometry (shrink or grow on vertical axis to get aspect ratio right)
- Add: If there is a clean line between all resources on the left and all resources on the right, then open up a space between the resources in the right location by scaling down all resources appropriately, and insert the new resource. Otherwise, do a fresh layout.
- Delete: If deleting leaves a new band of unused space, then upscale all other resources to fill that band. Otherwise, do nothing.

If multiple changes exist, they should be considered in this order: Swap, Delete, Add.

Manually invoking a new layout always starts fresh.

Film Strip Implementation on systems with Multiple Video Monitors

Our implementation of the filmstrip viewer is closely associated with the Magor Round Table. It is a deliberate design decision to tie the two together. However, the following sections (but the last) make an essential assumption: there is a camera on every active screen in the round table session. Screens without cameras (a.k.a. naked screens) are not compatible with other naked screens at the round table. As long as only one is present in a conference we can keep perceived gaze angle (and the trust of our users) intact.

General operation

1. Filmstrip viewers are screen resources. They are instantiated when screens are full and another image is advanced to one of the screens. The strip viewer is then shown at the bottom of the screen with two (or more) images.
2. When images are advanced from the viewer to the screen they are ALWAYS placed in round-table order.
3. Filmstrip viewers will be instantiated on any screen that has more than one image assigned to it.
4. Images that are manually edited in shape or location remember their new settings and location when they are minimized back to the strip and re-selected.

Managing image assignment to screens and cameras

Image assignment to screens:

Consider a system of two screens with two cameras. It is in an active session with four other systems with two shared collab screens for a total of seven images including the local-view split between the two screens using the filmstrip viewer. In this section we will discuss how images might be assigned to screens and under what conditions they could move from one screen to the other. We assume that collab screens are displayed to the right of the image of the person who shared it and the local view appears locally as the right-most image (see the how the film strip will look section of the original specification of the film strip).

We expect as a convention the default assignment of images to screens will be an even distribution starting on the left-most screen and that collabs and their owner's images will be kept to the same screen unless in a two-party call when the video image would be on one screen and the collab(s) on the next. The local view is not counted in the distribution, but shared collab images are counted. In the example below Av is the video image from system A; Ac is the collab image from system A and so forth.

Default enlarged image

The enlarged images on each screen would be the last image added to the conference unless the user had made a specific selection since the last image was added. We presume that when a new image is added to the conference it replaces the enlarged image on the screen it was assigned to.

Moving images from one screen to another

There could be several ways to accomplish moving images from one screen to another. In the first phase of deployment images can only be moved if they've first been promoted to full size. In a later stage they could be moved by click-dragging the filmstrip image to another screen. However we cannot break the round table order so the following rule ALWAYS applies:

Round Table Rule 1: When an image from the round table is moved from one screen to another all images to the right (if moved right) or to the left (if it moved left) will also be moved to the same destination screen as the image.

Round Table Rule 2: When video images are moved to another screen the camera assignment (for the remote system) is ALWAYS changed to the camera on the new screen. The only exception is where there is no camera on the destination screen.

Note that moving a collab image to the right will not drag the video image of the system that shared it since the video image is to the left of the collab image. Moving a video image to the left will not drag the associated collab image(s) for that system to the destination screen either since the collab image is to the right of the video image. The *stickiness* of video images to their shared collab images is only relevant when joining a conference for the initial screen assignment and only if there are already two or more participants in the conference.

Changing positions at the round table (optional or moderator-supervised)

To change positions we need a visualization of the round table. I believe simple drawings that can easily be iconized and understood are best. Consider the examples below:

For example, an x could mark the position of the local room. To change position you could simply click-drag the x-cube to a position between other cubes; to swap places click-drag the x-cube on top of the position to trade with.

Green cubes could represent systems so collab images are not represented.

Opting out of the round table rules is represented in the example below. I've evolved the icons a little as well.

Considerations for dealing with naked screens (screens without cameras)

It has been standard practice in the first couple of years of deployments that two-screen systems were sold with one camera and three-screen systems were sold with two cameras. The presumption was that one screen could be used for collaboration and did not require a camera. Cameras were expensive - not the least because they required a whole computer to encode the data.

Problems arise with gaze-angle however. When two two-screen systems connect in any conference and both have naked screens on the same side (both left or both right), the other person will appear to be looking in the opposite direction when looking towards the naked screen. When only one naked-screen-system is in a conference or when they are of opposite types (left-right or right-left) then the other systems can be configured to cope with the limitation.

If gaze angle is important then the use of naked screens must be restricted in situations where they cannot conform to the required configuration.

Note that a two screen system with a single camera that could be placed on either screen or having two cameras but only enough processing power for one does not pose a gaze angle problem.

A compromise for two-screen-systems is to place the camera between the screens. We would lose direct eye contact, but would regain apparent gaze angle congruity. That is, people using the system would appear to be looking in the right direction when looking away. This is probably not acceptable given the social significance of not being able to meet a reciprocal gaze.

The filmstrip is a feature of a video endpoint connected to other video or collaboration endpoints. The filmstrip is located near the lower edge of the screen and is a single row of thumbnail videos from all sources at all conferenced endpoints. The filmstrip is always on top (i.e. always completely visible). Using known GUI methods a user can directly promote any thumbnail to the full screen, or an allocated fraction of the full screen tiled using known methods. Alternative GUI actions cause the newly promoted thumbnail to either add to or replace existing promoted video or tiled videos.

Some of the more important variations are summarized in rank order of importance: Thumbnails may be either true video streams or collaboration (e.g. presentation, document, web page, etc). Thumbnail videos are arranged horizontally in order as if sources were present at a virtual round table. Endpoint display capability comprises more than one monitor arranged in a horizontal configuration treated, for the purposes of the invention, as a single wide display. (i.e. the filmstrip and promoted videos use the entire width of all displays). Video sources are categorized. Certain source categories (e.g. real video) are allowed to fill the entire screen behind the filmstrip; other categories (e.g. collaboration) are not obscured by the filmstrip. In the event of a physical object (e.g. video camera) in front of any monitor the filmstrip includes a gap in the filmstrip so that the filmstrip is not significantly hidden by the camera. Promoted videos may be moved and sized using known GUI methods. Promotion may be automated to a degree using methods known and used in, for example, Multiparty Conference Units (MCU). Available monitor space may be reduced to allow for common GUI features (e.g. Windows Task Bar). Some or all videos may be placed in standard windows rather than being tiled.

Embodiments described so far relate to a mesh topology conference. Prior to this invention, and other prior art, non-mesh parties could participate in a mesh conference but without the personal control over video content and other benefits offered by the filmstrip invention in a mesh conference.

An important aspect of the invention relates to control to mixed topology conferences, i.e. multi-party conferences in which some endpoints are mesh interconnected and others are star connected to one endpoint in the mesh.

In this aspect of the invention non-mesh endpoint(s) user(s) can use the filmstrip user interface described above to exercise the same control over the their video presentation as would a mesh connected user.

In one embodiment this is achieved at a star connected endpoint using web browser technology. A web page including the filmstrip is hosted on a Star Server and displayed at the star endpoint location. The Star Server receives video from all mesh-connected endpoints constructing the filmstrip on the web page. User interaction with the filmstrip received by the Star Server results in the appropriate video stream being transmitted to the star endpoint.

Fig 8 illustrates a typical mixed topology conference call. Endpoints 81, 82 and 83 are mesh connected. That is to say each endpoint transmits all its media (video, audio and data) to all other mesh endpoints via multiple connections 88 (media and call control, total count = $n \times (n-1) / 2 \times 2 \times 2$). Star endpoint 84 connects to any one of the mesh endpoints, in this example it connects to endpoint 82 via connection 89. Other star endpoints may be similarly connected to the same or other mesh endpoints. Or multiple star end points, e.g. 85 and 86, may connect to an MCU (multipoint control unit) which has one leg connected to one mesh endpoint, in this case endpoint 83. All connections shown as a single line in the Figure typically comprise Video(s) Audios(s) media and data, each connection being a two-way IP connection. Connection 89 might, for example, be a Skype connection.

Fig 9 illustrates a multiparty conference embodying the invention comprising mesh-connected endpoints 81, 82 and 83 and a star endpoint 84 connected to mesh endpoint 82. According to an embodiment of the invention a Star Server 91 and a computer 92 are added. The computer 92 and star endpoint 84 are co-located 93 i.e. a user or users at 93 can view and access both devices. Computer 92 is running a browser, or equivalent program (App) that can display a web page, or other suitable presentation, hosted by Star Server 91 and the web page 98 includes a filmstrip 99 as described in IDF 29 (esp. Fig 4). The web page 98 has been associated with the conference and endpoint 84 using known methods, e.g. conference login procedure.

Computer 92 could be any computer for example a laptop or smart mobile phone (iPhone or iPad). Furthermore Endpoint 84 function may run on that same computer 92.

Endpoint 82 has been adapted to support the standard (e.g. SIP or H.323) connection 89 to the star endpoint 84 and also to the Star Server 91. When the Star Server 91 discovers that there is one (or more) Star Endpoints participating in the conference, e.g. after a login, it will determine which mesh endpoint is connected to the star end point (or respective endpoints). Various methods of doing this would be apparent to a person skilled in the art, but one method would be to send messages to each mesh endpoint via control connections 95, 96 and 97 to respective mesh endpoints 81, 82 and 83. Such a message would indicate that a star endpoint is connected to the conference and its identification e.g. one or more of its IP address, MAC address, domain name, or extension number etc.

Referring to Fig 10, a mesh endpoint 82 is shown, it has been adapted to include a Star Proxy function, similar to an embedded MCU. Connections such as 96 might terminate in the Proxy Control function 104.

Once an endpoint, in this case endpoint 82, has been designated as a proxy for the star endpoint 84 it will instantiate local Mixer and Repeater functions which will act as a mesh proxy for the star endpoint. Control connections 108 and 109, for example software 'handles', control the connection and operation of the Mixer and Repeater respectively using well-known MCU technology.

The Proxy Control function 104 will communicate with other Mesh Endpoints in the conference using any method known to set up a mesh conference, for example the same procedures used to connect endpoint 82 to the mesh before being designated star proxy. Most call set-up connections which function in a well-known way, e.g. SIP, and have been omitted from Fig 10 for clarity. Thus Mixer function 102 will be connected to the transmit media connections (video, audio and data) of endpoints 81, 83 and local endpoint 101 via connections 1014, 1016 and 1012 respectively. Similarly Repeater function 103 will be connected to the receive media connections (video, audio and data) of endpoints 81, 83 and local endpoint 101 via connections 1015, 1017 and 1013 respectively. The output of Mixer function 102 is connected to star endpoint 84 via

connections 1010 (video, audio and data). The input of Repeater function 103 is connected to star endpoint 84 via connections 1011 (video, audio and data). The operation of Mixer 102 and Repeater 103 are essentially the same as similar functions within the local endpoint 101 and typically these same procedures would be used to implement the bodies of the Mixer and Repeater functions.

Connections are described as video, audio and data all may or may not be present in a given conference call.

The Star Server 91 is shown as a separate computer but it could be a program running on a computer within one of the mesh endpoints e.g. 11 in Fig 1. The browser is described as a program running of a separate computer 92 but it could be a program running on a computer in endpoint 84. In the above Endpoint local functions 101, Proxy Control 104, Mixer 102 and Repeater 104 are shown as discrete functions for the purpose of making the invention clear. In many embodiments these functions may be much more integrated and not easily identifiable as discrete functions.

In the preferred embodiment SIP protocol is used to establish conferences but other protocols could be used, e.g. H.323.

In the above description, connection of a single star endpoint to a mesh conference is described. Any number of similar Star Proxies 106 comprising Proxy Control 104, Mixer 102 and Repeater 104 could be integrated into a single mesh endpoint or multiple mesh endpoints allowing any number of star endpoints to participate in a conference that has a mesh topology at the core. In which case they preferably share a common Proxy Control and other functions.

Alternatively the Star Proxy(s) 106 could be embodied in a standalone computer or integrated into the Star Server 91, however there is benefit in integrating the Star Proxies 106 into Mesh Endpoints 82 because doing so minimizes the number of network connections.

Taken to the extreme, which would be understood by persons skilled in the art any or all functions constituting the Star Proxy 106 and or Star Server 91 could be implemented in

a virtual computer or computers within a virtualized computer environment known as a cloud.

Whether Star Proxies 106 are integrated into Mesh Endpoints 82 or the degree to which they are integrated need not be a design decision but rather a decision made at installation time or even dynamically at the time a conference is scheduled or set up or as participants join and leave ad hoc. Such a resource allocation decision may depend on the quality of video and or audio media in the specific conference.

In a further case the 'star endpoint' could in fact be an MCU 87 itself connected to multiple star endpoints as depicted in Fig 8. In such a case computer 92 displaying the filmstrip 99 (Fig 10) would typically be co-located with one of the star endpoints 85 for example so that users could conveniently view and interact with each device.

The proxy allows the endpoint 84 to participate in the conference in much the same way as if it were part of the mesh topology. For bandwidth considerations, it is undesirable to stream high definition video to the endpoint 84 from each mesh-connected endpoint. In accordance with embodiments of the invention it is only necessary to stream the full size feed from the endpoint currently promoted to the main window. Only reduced size feeds need be streamed to create the filmstrip, either to the endpoint itself or to a browser running on a computer co-located at the endpoint. The user can then select a frame on the filmstrip for promotion, and the promoted feed is then substituted for the current full sized frame feed.

In this way, the non-mesh connected endpoint is able to benefit from the advantages of being able to view all the video feeds at reduced size in the film strip and select any of the feeds for promotion without consuming the bandwidth on the link 89 that would be required to carry all the high definition feeds to the endpoint 84 simultaneously.

In all cases described above all end points, star or mesh, benefit from ability to use the filmstrip described with reference to Figures 1 to 7.

We claim:

1. An endpoint for a teleconferencing system wherein multiple parties participate in a teleconference from different locations, comprising one or more display screens, and which is configured such that a filmstrip containing simultaneous images or icons representing the participants is displayed on said one or more display screens in a spatial relationship that represents their real-world or virtual-world spatial relationships.
2. An endpoint as claimed in claim 1, wherein the images or icons are displayed in a spatial relationship that represents the participants as being located at a virtual table with the conference participants being envisaged as sitting round the virtual table.
3. An endpoint as claimed in claim 1, wherein the virtual table is a round table.
4. An endpoint as claimed in claim 2, wherein the spatial relationships are preserved across the system so that the display at each endpoint represents the view at that endpoint of the spatial relationship of the participants at the virtual table.
5. An endpoint as claimed in claim 1, wherein the images or icons are in the form of video.
6. An endpoint as claimed in claim 1, wherein the images or icons are promotable and demotable between a full or intermediate size and a reduced size in response to an event.
7. An endpoint as claimed in claim 6, wherein the event is a user interaction.
8. A teleconferencing system as claimed in claim 7, wherein the user interaction is in the form of a mouse click.
9. An endpoint as claimed in claim 6, which is configured such that when a reduced size image is promoted to full size, the video continues to run in the reduced size image, which retains its spatial relationship with the other images representing the real-world or virtual world spatial relationships of the participants.
10. An endpoint as claimed in claim 1, which is further configured to display collaboration images or icons representing presentations from conference participants on

said one or more display screens at a conference location in a spatial relationship that represents their real-world or virtual-world spatial relationships.

11. An endpoint as claimed in claim 11, wherein collaboration images or icons are positioned close to the image or icon representing the participant making the presentation.

13. An endpoint as claimed in claim 6, which is configured such that a newly added item is immediately promoted.

14. An endpoint as claimed in claim 1, comprising at least two display screens, wherein the images or icons are draggable between the different display screens, and wherein an image or icon dragged to another display screen “pushes” images or icons ahead of it so as to preserve the order of the images or icons and thus their spatial relationship.

15. An endpoint as claimed in claim 1, wherein the end participants are connected over a mesh network, and a proxy at one of the endpoints receives video feeds for presentation to a user at a non-mesh connected endpoint.

16. An endpoint as claimed in claim 15, wherein the proxy is associated with a server for presenting the video feeds at reduced size to a user located at the non-mesh connected endpoint.

17. An endpoint as claimed in claim 16, further comprising a control function to permit the user to select one of the video feeds for promotion, and wherein in response to a command from the user, the proxy sends the promoted feed as full size video to the non-mesh connected endpoint.

18. An endpoint as claimed in claim 17, wherein the star server constructs the filmstrip on a web page accessible by the end user.

19. A teleconferencing system comprising:
a plurality of endpoints, at least some of which are connected in a mesh configuration and at least one of which is connected in a non-mesh configuration to a selected one of the mesh-connected endpoints, and which are configured such that a film strip with frames containing reduced-size video feeds from the conference participants is

is displayed at the mesh endpoints;

a proxy at the selected mesh-connected endpoint for the non-mesh connected endpoint and connected to each of the mesh-connected endpoints to receive video feeds from the mesh-connected endpoints for the non-mesh connected endpoint;

a server associated with the proxy for serving the film strip with frames containing reduced-size video feeds from the mesh-connected conference participants to the non-mesh connected endpoint; and

a control connection permitting a user located at the non-mesh connected endpoint to select a video feed on the film strip for promotion to full size and to initiate transfer of the full size video feed to the non-mesh connected endpoint.

20. A teleconference system as claimed in claim 19, wherein the server is configured to serve the filmstrip to a browser co-located with the non-mesh connected endpoint.

21. A teleconference system as claimed in claim 20, wherein the browser is displayed on a computer co-located with the non-mesh connected endpoint.

22. A teleconference system as claimed in claim 21, wherein the proxy and server are merged into a virtualized environment.

23. A teleconference system as claimed in claim 19, wherein the frames are displayed in a spatial relationship that represents the participants as being located at a virtual table with the conference participants being envisaged as sitting round the virtual table.

24. A teleconferencing system as claimed in claim 23, wherein the virtual table is a round table.

25. A teleconferencing system as in claim 23, wherein the spatial relationships are preserved across the system so that the display at each endpoint represents the view at that endpoint of the spatial relationship of the participants at the virtual table.

26. An endpoint for use as a mesh-connected endpoint in a teleconferencing system comprising a plurality of endpoints, at least some of which are connected in a mesh configuration and at least one of which is connected in a non-mesh configuration to a selected one of the mesh-connected endpoints, wherein a film strip with frames containing reduced-size video feeds from the conference participants is displayed at the

mesh endpoints, the mesh-connected endpoint comprising:

- a proxy for connection to each of the mesh-connected endpoints to receive video feeds from the mesh-connected endpoints for the non-mesh connected endpoint;

- a server associated with the proxy for serving the film strip with frames containing reduced-size video feeds from the mesh-connected conference participants to the non-mesh connected endpoint; and

- a proxy controller permitting a user located at the non-mesh connected endpoint to select a video feed on the film strip for promotion to full size and to initiate transfer of the full size video feed to the non-mesh connected endpoint.

Abstract

In a teleconferencing system, multiple parties participate in a teleconference from different locations. The system is configured such that a filmstrip containing simultaneous images or icons representing the participants are displayed on one or more display screens at a conference location in a spatial relationship that represents their real-world or virtual-world spatial relationships

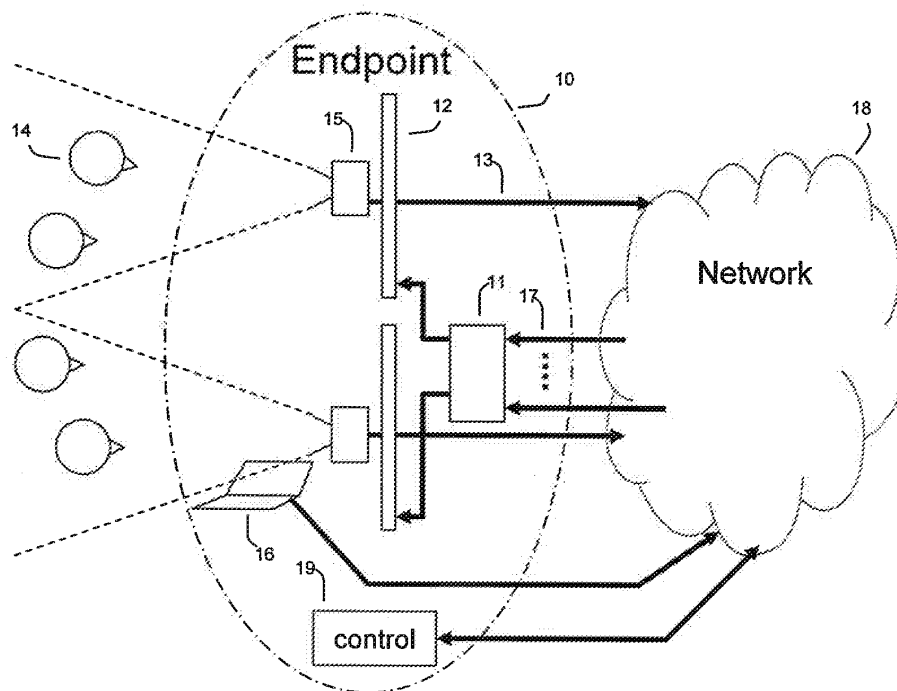


Fig 1 Typical mesh connected video conference end point

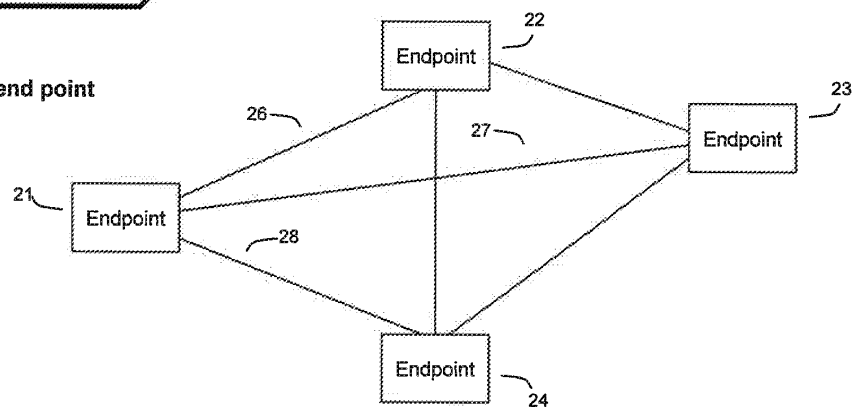


Fig 2 Typical mesh connected four party video conference call

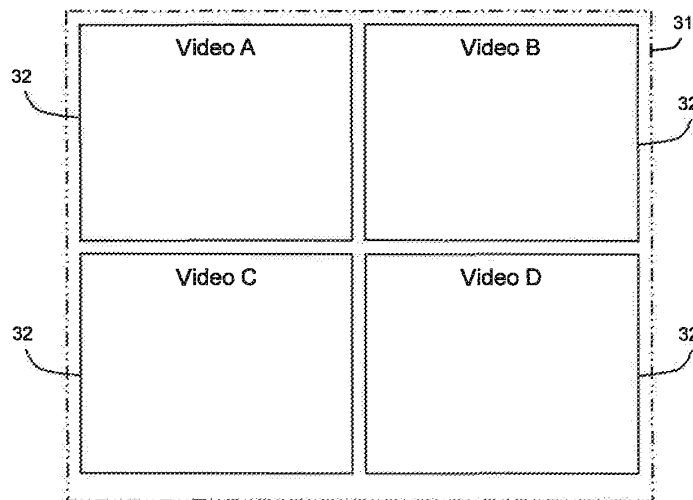


Fig 3a Typical prior art screen layout

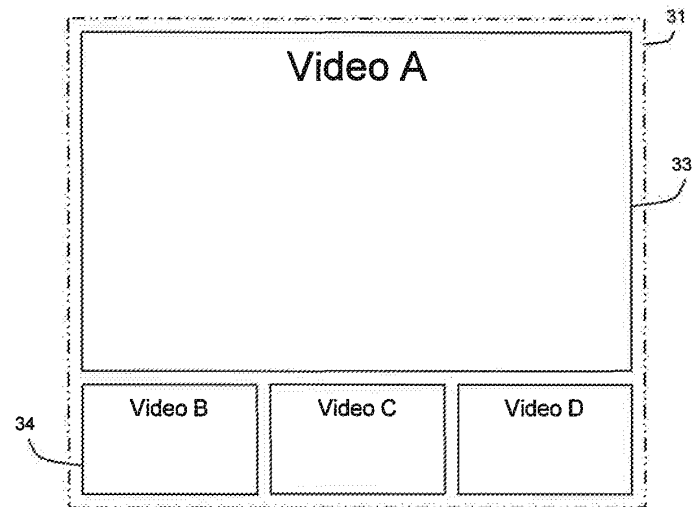


Fig 3b Typical prior art screen switched layout

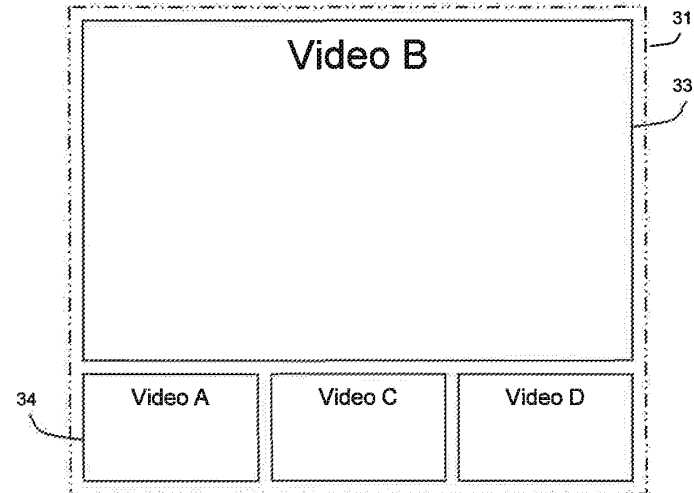


Fig 3c Typical prior art screen switched layout a moment later

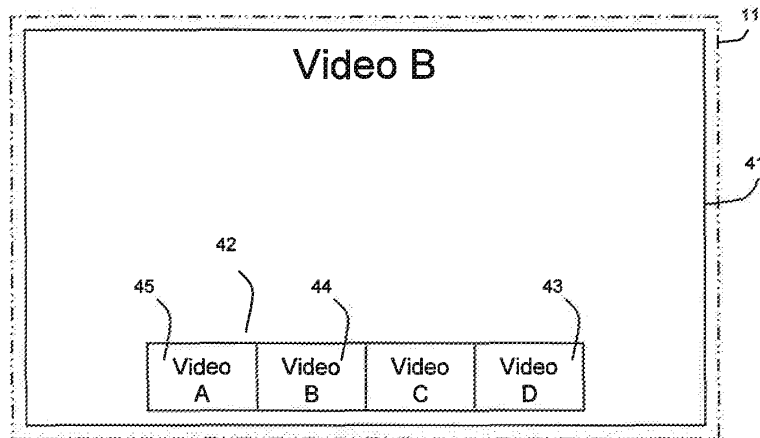


Fig 4a Typical screen layout at location D

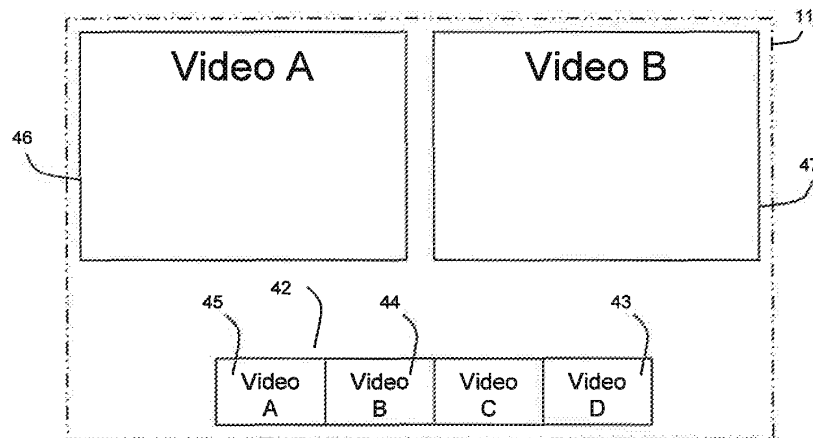


Fig 4b Typical screen layout at location D with two videos promoted

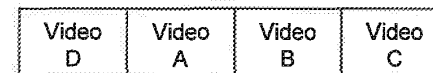


Fig 4c Filmstrip at location C

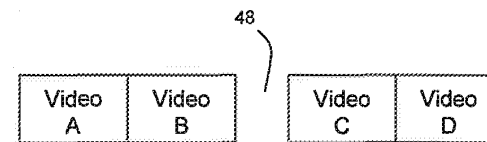


Fig 4d Filmstrip with camera provision

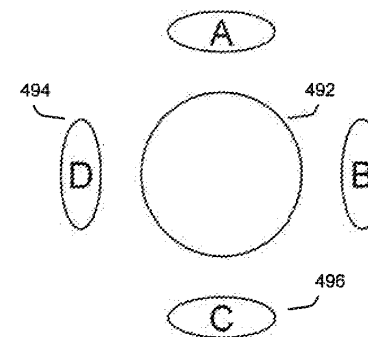


Fig 4e Round-Table concept

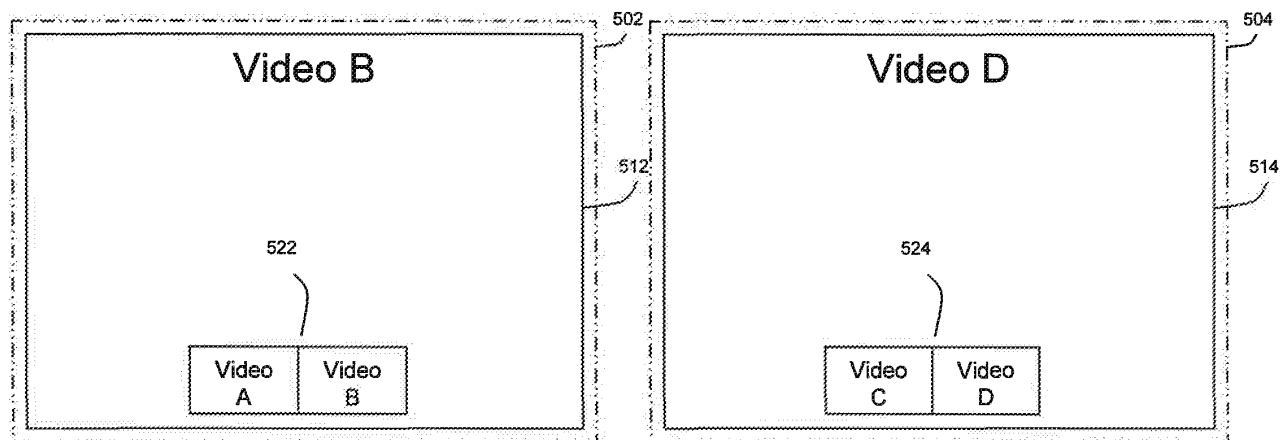


Fig 5a Typical screen layout using two monitors as seen at location D

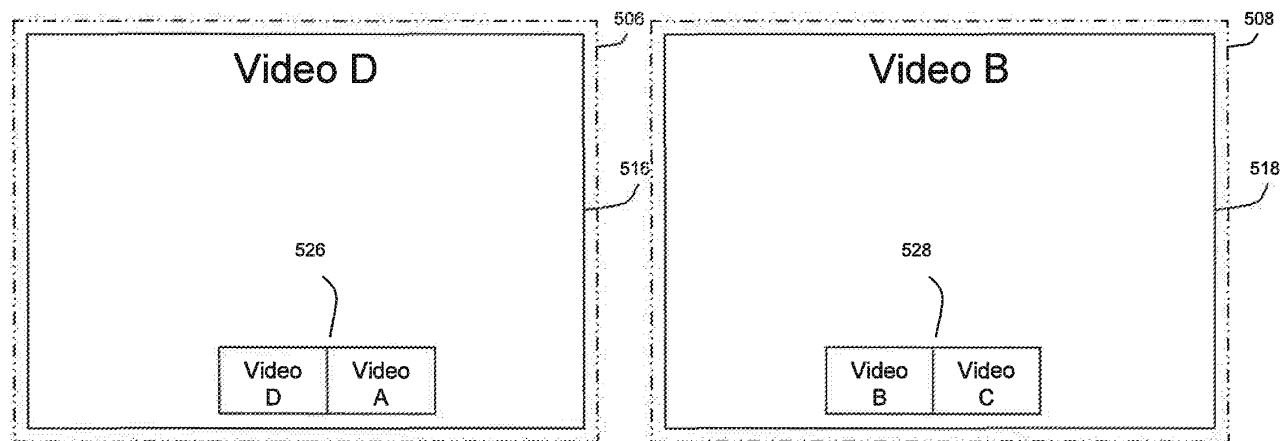


Fig 5b Typical screen layout of the same conference, using two monitors, as seen at location C

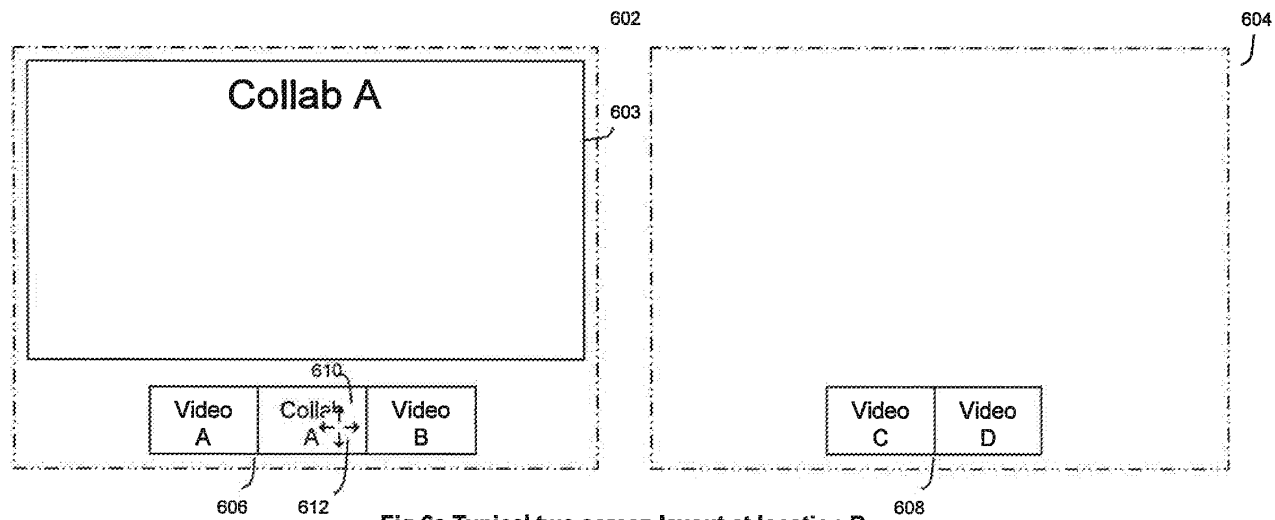


Fig 6a Typical two screen layout at location D

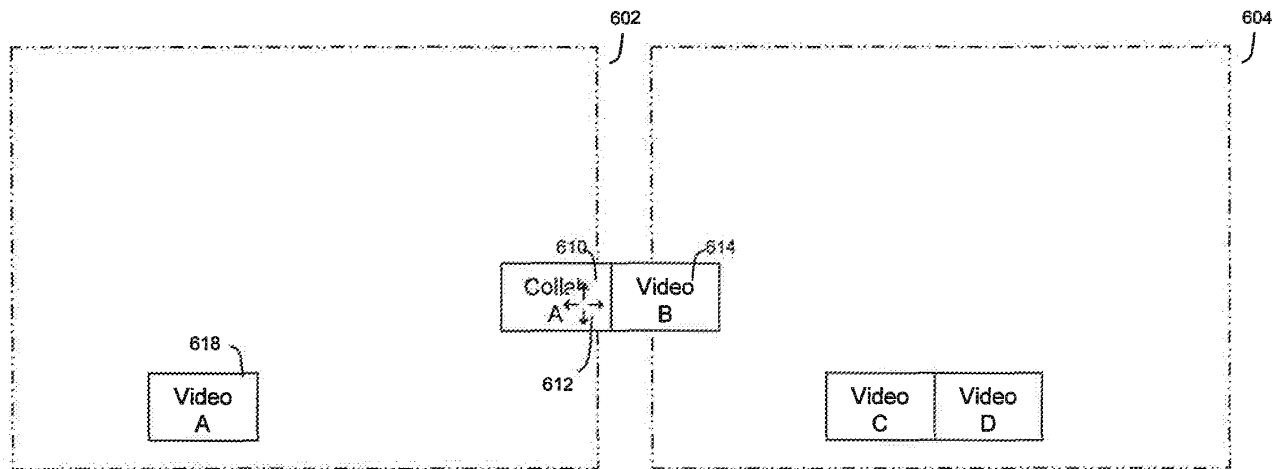


Fig 6b User at D moving Filmstrip thumbnail for Collab A

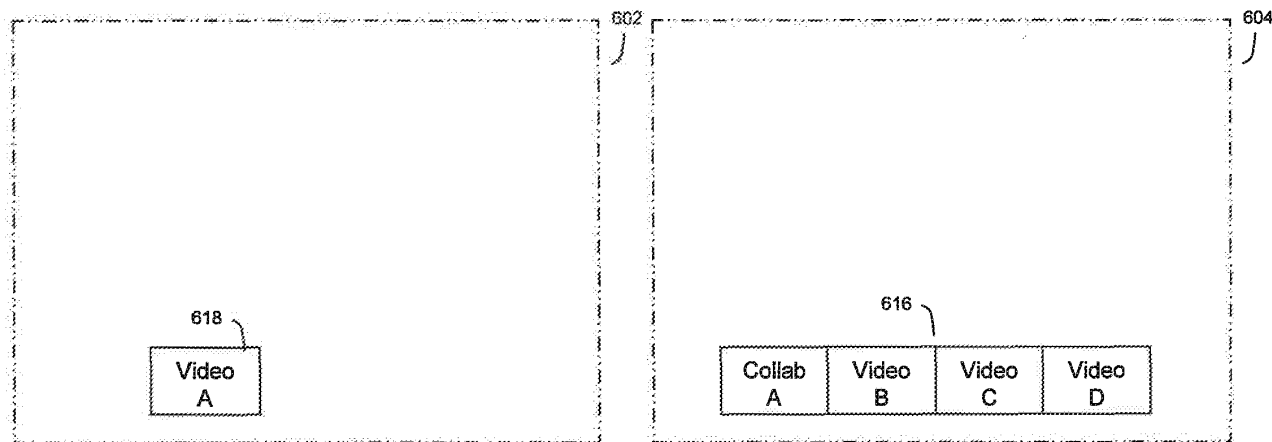


Fig 6c Filmstrip at D after user moved Collab D

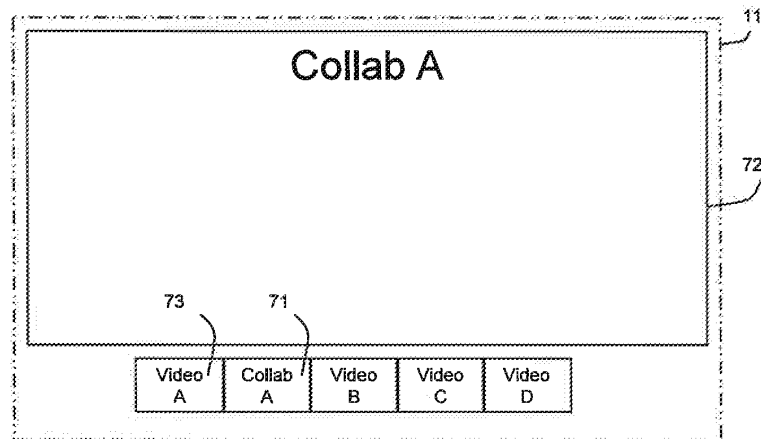


Fig 7a Typical screen layout with promoted Collaboration

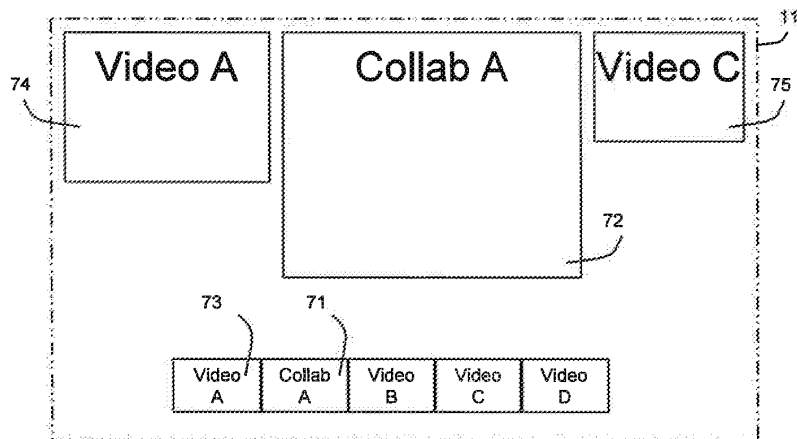


Fig 7b Typical screen layout with promoted Collaboration and Videos

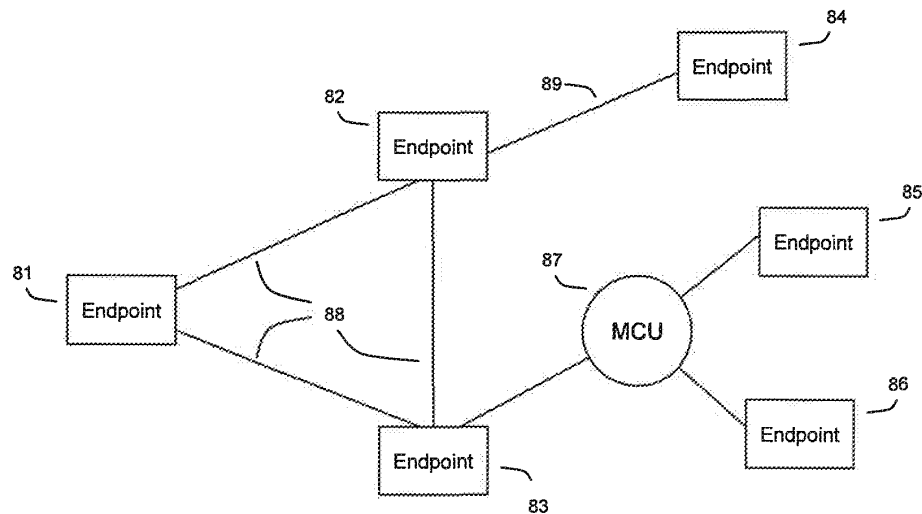


Fig 8 Typical prior art mixed topology conference call

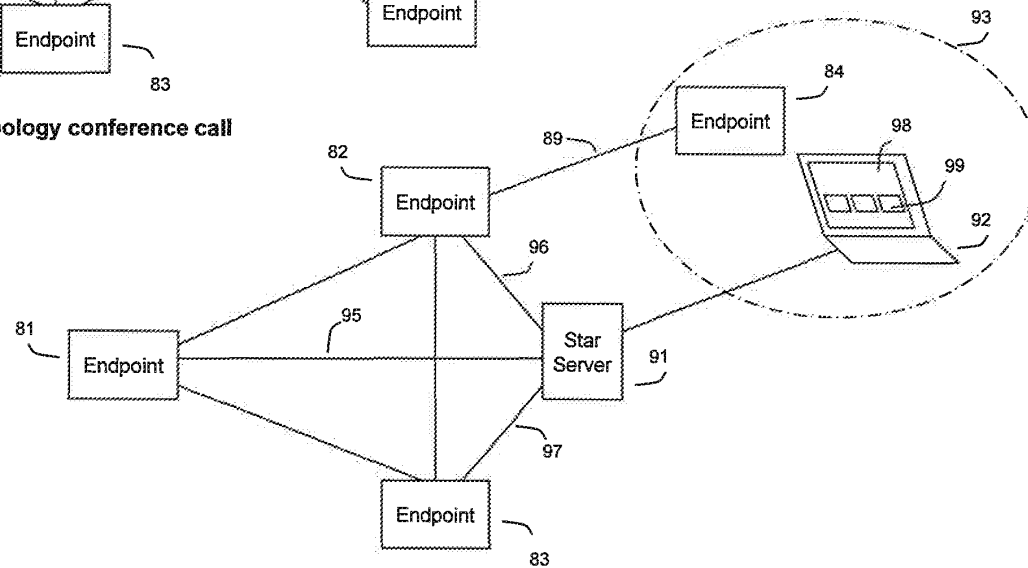
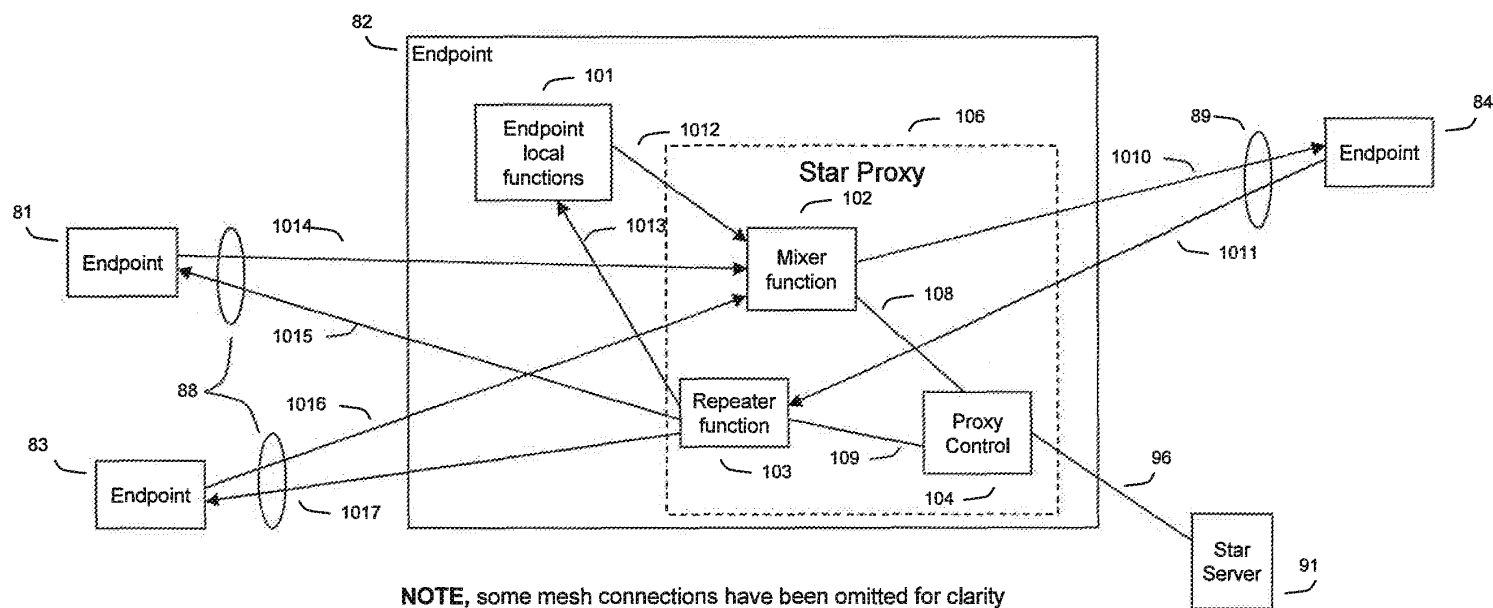


Fig 9 Mixed topology conference call employing Star Server



NOTE, some mesh connections have been omitted for clarity

Fig 10 Features of Mesh endpoint proxy for Star Endpoint

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	28319-US
		Application Number	
Title of Invention	VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT		
The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76. This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.			

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	28319-US
		Application Number	
Title of Invention	VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT		

Application Information:

Title of the Invention	VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT		
Attorney Docket Number	28319-US	Small Entity Status Claimed	☒
Application Type	Nonprovisional		
Subject Matter	Utility		
Suggested Class (if any)		Sub Class (if any)	
Suggested Technology Center (if any)			
Total Number of Drawing Sheets (if any)	9	Suggested Figure for Publication (if any)	1

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Prior Application Status		Remove	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	28319-US
		Application Number	
Title of Invention	VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT		
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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	28319-US
		Application Number	
Title of Invention	VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT		

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	28319-US
		Application Number	
Title of Invention	VIDEOCONFERENCING SYSTEM PROVIDING VIRTUAL PHYSICAL CONTEXT		

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First Named Inventor/Applicant Name:		David Brown		
Filer:		Richard J. Mitchell/Carolynn Irvin		
Attorney Docket Number:		28319-US		
Filed as Small Entity				
Utility under 35 USC 111(a) Filing Fees				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Utility filing Fee (Electronic filing)	4011	1	98	98
Utility Search Fee	2111	1	310	310
Utility Examination Fee	2311	1	125	125
Pages:				
Claims:				
Claims in excess of 20	2202	6	31	186
Miscellaneous-Filing:				
Petition:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
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Extension-of-Time:				
Miscellaneous:				
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			f13cd8b07084c8189bcc81f4178ec649828c64c7		
Warnings:					
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2	Claims	Claims.pdf	174183	no	4
			56501a1dd1d7e0c1650fd973b053fc11a0b64c34		
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3	Abstract	Abstract.pdf	16785	no	1
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5	Application Data Sheet	ADS.pdf	1754584	no	6
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